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UNIVERSAL EDUCATION
THE SAFETY OF A REPUBLIC

VOL. XXIX

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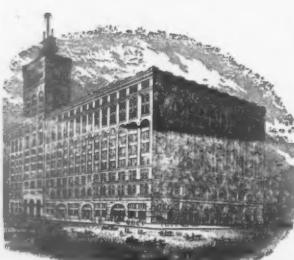
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"ORIGINALITY."

TRUTH belongs to mind as mind. Hence every true thought I have belongs to the eternal order of things and cannot have originated with me. But also no phase of truth exists *for me* until by my own activity as mind I have developed it from and within my own individual consciousness. In this sense every truth I think is "original" with me, though it did not originate with me. Truth is the form in which mind unfolds itself into concrete realization as individualized personality. And the degree of originality of any individual mind is exactly measured by the extent to which it has advanced in its own positive, rational self-formulation. Strictly speaking, then, "originality" is not so much a question of dates as a question of adequacy in the unfolding of an idea. In conversation Coleridge strikes out a gerinal thought. Wordsworth goes home, develops the thought, finds its rhythmic form and writes it out in finished verse. Next day he seeks out his friend and says to him: "Coleridge, I have a new poem to read you." In the midst of the reading Coleridge nervously interrupts with: "Why, that's *my* thought!"

To which Wordsworth warmly responds: "No, no; it's mine, *mine!*!" And Coleridge was right in respect of date, and Wordsworth was right in point of adequacy of development and finish of expression.

And the latter is what we care, and ought to care, most for. It is the worthier phase of originality, because it embodies a higher degree of worth to man. The seed is valuable, indispensable. But it and its planting are rightly forgotten in the enjoyment of the ripened fruit. Only when we wish to trace the process through which the ripened fruit has come to be, as ripened fruit, is it worth while to recall the seed and its planting.

To which reflections we have been led by several things now current.

One of these is the curious eagerness with which it has been urged here and there that the "Monroe Doctrine" was not originated by Monroe, but by Canning. As if Monroe, and with him and after him the American people, had done nothing whatever to develop that doctrine into vital significance and specific form with reference to our own national needs! As if we had only to find what was in the mind of the English minister when he threw out the suggestion from an English point of view in order to discover the absolute limit of possible meaning in the doctrine; and as if we were under supreme obligation forever to restrict ourselves as Americans to just that

meaning! And after all it is not so certain that Canning was really first to suggest this idea.

Another curious illustrative fact presents itself in a short article by Principal Grant, of Queen's University, and published in the *Canada Educational Monthly*. The article is called out by the statement in Dr. Goldwin Smith's "History of the United States," to the effect that "Massachusetts led the world in the institution of common schools, to which all citizens were required to contribute and which all citizens were required to use."

Principal Grant considers this to be nothing less than arraying the old Bay State "in borrowed feathers." He declares that "Scotland had common Schools, as well as Universities, before the Pilgrim Fathers instituted either." But from his own statement, immediately following the remark just quoted, the "common schools" of Scotland were not *public* schools, since in them "No provision had been made for educating the bulk of the people."

From which he goes on to present some exceedingly interesting facts as to the work done by the *Church* of Scotland in the way of elementary education. But—"borrowed feathers?" Admirable as was the spirit of the Church; admirable as in many ways the system of education carried on in Scotland by the Church really was, yet, according to Principal Grant's own showing it was only in 1872 that the *public* school system of Scotland was developed into a form at all comparable, as a system, with that of Massachusetts.

Absolutely free to shape institutions according to their own conviction, it would have been strange indeed if the people of the Old Bay State—good, sturdy, aggressive, Englishmen as they were—should not have improved in many ways upon the time-incrusted forms in which the conservatism of the

mother country was still content to move. And that they did improve very effectually upon those forms few, even in England, appear to doubt to-day. Meanwhile a German—Dr. E. Schlee, Director of the "Real Gymnasium" at Altona, and who was one of the German representatives at the World's Fair—not only notes the fact (U. S. Commissioner's Report, 1892-'93, I., 534), that "on the whole the American system of education still bears an English character," but also declares with reference to our "public school" system that this is "a purely national creation."

But even if this "purely national creation" be understood only in the sense of an improvement upon earlier and relatively rudimentary forms, it still constitutes a high claim to genuine originality on the part of the Pilgrim Fathers and, in general, of the Revolutionary Fathers of America—who, let us also remember, were none the less Sons of England.

On the other hand it may just as well be plainly said that—above all, in the world of mind—there never was invented a flimsier claim to superiority than that based on mere priority. It must needs still be repeated that true kingship is *inherent, not inherited.*

THE "ETERNAL WOMANLY" IN EDUCATION.

THE report in full of the meeting of the N. E. A. at Denver, reaching a little beyond 1,100 pages, is very nearly as formidable a volume as the first volume of U. S. Commissioner Harris' Report, elsewhere referred to. Right at the heart of it—in both senses—are the remarks of Mrs. Eudora L. Hailman, of Washington, D. C., comparing Herbart and Froebel. Her short but telling speech opened the discussion of an admirable—though perhaps too highly anti-thetical—paper by James L.

Hughes, Inspector of Public Schools, Toronto, Canada.

Mrs. Hailman finds Herbart limited in the fact that he failed to recognize the value of the *spontaneous* and earliest life development in the further fact of "his blindness to woman's share in this." Herbart directed his attention to the formal school-life of the child, "rather of the boy child," and "divine" "with reference to the advancement of learning and the establishment of ethical character in the General *citizenship.*" On the contrary Froebel "saw and utilized the value of the first six years in child-life as essential in the development of soul."

In this respect Herbart failed to see beyond his time, in which "the primary education was merely *material* instruction, and even that in the *hands* of men only, who, from *necessity*, could not divine the soul through the infant being." (The real reason, by the way, why the actual work of elementary education has been by common consent, *assigned* to women). To which she adds the significant remark that "Infant psychology is concurrent with the advent of the woman teacher and with the recognition of woman as the most important agent in the education of mankind."

In this Mrs. Hailman appears to have really divined the secret of infant psychology. This intimation seems to point, and right as we think, to this as the truth of the matter: That "Infant Psychology, for immediate practical educational purposes, is far more a matter of *intuitive apprehension* dependent upon the inherent delicacy and "sensitiveness" which specially characterizes the feminine mind, than a matter of deliberate analysis dependent upon the reflective, logical quality which specially characterizes the masculine mind.

From which it is to be confidently inferred that the cold-inked records of all the cold-blooded study of infants by our super-scientific mas-

Herbartian or of women), will in the outcome weigh less than a breath with of the spontaneous, warm-hearted mother or teacher in the actual management of little children. For each child is unique; and nothing on to less than the "eternal womanly" child, the soul of mother or teacher can and divine on the instant what precisely advantage to be done in any given case.

General culture, especially by way of thorough familiarity with the best literature, and with the deepest music and with the finest soul." Works of painting and sculpture, failed together with a clear knowledge of which the principles of natural science were vitalized by a comprehensive view in psychology, and all this transformed into positive enthusiasm through genuine religious sentiment—such is the supreme need of the active hour in Elementary Education.

THE federation of women's clubs in Missouri for the specific purpose of self-culture is a notable educational event. The more general the study of literature, art, science and history becomes, the more elevated will be the general tone of society. And the more enlightened and refined social sentiment becomes by so much the more will social energies be turned into effectual channels of genuine social reform. The new movement is gathering force and is full of promise of highest good.

STATE SUPERINTENDENT JOHN R. KIRK has recently issued an important circular of information to county institutes to be held the coming spring and summer. Every county superintendent and every teacher of a country school ought to possess a copy of this circular and act upon its suggestions.

THE Cook County Normal School has been offered to the city of Chicago and has been accepted by the Board of Education there.

UNIVERSITY EXTENSION.

THOSE who have been wont to regard University Extension as only a new form of educational plague will do well to make a special study of the second annual report issued by the Extension Department of the University of the State of New York. It is a volume of over five hundred pages, and contains a full survey of the work already accomplished in this relatively new field, both in Europe and in America.

Relatively new; for the movement has already been in progress for a full quarter of a century and is steadily progressing in vigor and in organic unity. So that now, for example, "every university in England is engaged in it." And French observers, apt as they are to be fastidious, report only favorably of the results.

No doubt, as indicated by Prof. James E. Russell, (now of the University of Colorado), by whom an important section of this report was prepared, the conditions in America are much more complicated than in England, and we must, in this respect, as in others, work out our own salvation. And very likely here the movement will in each state find its natural center in the State University. Even yet, indeed, the vital significance of our State Universities in our peculiar American scheme of state education seems to be little more than dimly apprehended even by the few, and not apprehended at all by the many. There is a world of prophetic intimation in this direction to be found in a careful study of the organization of the University of the State of New York.

"Diplomacy," as usually practiced, may best be defined as Lyning reduced to a science; only, as Aristotle says, there can be no science of the Accidental—i. e., the irrational.

U. S. COMMISSIONER HARRIS' REPORT FOR 1892-93.

IT has been said by the head of a German educational institution that the reports of the American Bureau of Education furnish to foreigners "richer information than can elsewhere be obtained." The first volume of the last report issued contains 1224 closely printed pages, and another volume is to follow in a short time.

Naturally the greater part of this report is devoted to education as represented at the World's Fair. Specially interesting are the comments on American education made by German and other European critics. It is admitted that the intellectual ferment is more widely diffused here than in the Old World, but also hinted—and, of course, justly—that in most things we are still somewhat crude. Astonishing to Europeans, also, is the immense range of activity accorded to women in our educational work; though in this, too, it is freely admitted that American social life renders such adjustment possible and beneficial beyond what could be in Europe.

Over 300 pages are devoted to the World's Library Congress and more than 200 pages to "Notes on Education at the Columbian Exposition," by Hon. John Eaton, ex-United States Commissioner of Education. These "Notes," as might be expected, present a sort of bird's-eye view of the subject of education according to exhibits from all the states of the Union, and from foreign countries as well.

In short the report as a whole is a mine to be worked rather than a book to be "reviewed."

There are men who, on occasion, will assume any degree of ignorance to cover up their meanness; and resort to any measure of meanness to cover up their ignorance.

THE SCHOOLS OF IOWA.

IN his recently issued biennial report as Superintendent of Public Instruction of the State of Iowa, Hon. Henry Sabin presents a notable document covering a wide range of immediately practical educational interests.

Among these is the very vital one of increased efficiency in county supervision; to which, indeed, the rapidly growing significance of teachers' institutes only adds further emphasis. And here increased efficiency can scarcely be secured otherwise than through closer organization; and this in turn further implies another step in centralization by which the office of county superintendent would be brought more directly and fully into subordination to the central office of the state.

On first view this might seem virtually to propose the substitution of state supervision for county supervision. But by the fact of his election the county superintendent would still be a county officer; and it would no more follow that his functions would be merged in the functions of the State Superintendent by such subordination than it follows now that the responsibility of a sheriff to the Governor of the state reduces him to a mere functionary of the state executive. Indeed we are learning, by however slow degrees in America, that reasonable subordination in a genuine organic social whole, is precisely the way in which to realize the highest degree of actual concrete local independence. Even the active inspection of institute work from the State Superintendent's office, already in practice in some states, and recommended by Mr. Sabin for Iowa, need not in any sense be dictatorial, but rather informational and stimulating. Meanwhile experts should be chosen as county superintendents.

Another feature, of utmost sig-

nificance for the present and the future of education, is the increase of facilities for secondary education. The establishment of "Township high schools" is the immediate form this new demand is about to take, or rather, the form it is already taking. Such schools will react directly on the elementary schools, as they have already done in the cities and towns, by furnishing better prepared teachers for these schools.

We are rather interpreting than reproducing Mr. Sabin's arguments and cannot, of course, follow him through his discussion of all the varied themes of his report, including Patriotism, Temperance Instruction, Educational Journalism, School Legislation (comparative view including some half-dozen states), Free Public Libraries, School Architecture, Teachers' Reading Circle, State Normal Schools, State University, etc., but can only commend it to the notice of all who are awake, or awaking, to the fact that education is immeasurably the foremost interest which the Body Politic is to-day engaged in promoting.

SENATOR COCKRELL and Representative Tracy, of Missouri, have set on foot in Congress a bill intended to secure to the University of the State of Missouri a grant of 24,590 acres of land in the state "to reimburse the university for loss caused by the action of the Federal Government." The equity of the bill is not questioned, and the bill ought to become a law at once.

Similarly the bill "To make an equitable adjustment of the grants of land to the several states of the Union for seminaries of learning or universities" has everything in its favor and no good reason against it. The bill will, if it becomes a law, give to our State University over a half million acres. These measures appear to be of unques-

tionable wisdom, and should be into effect at the earliest moment.

The further proposition (House Bill No. 3618) to urge forward various forms the improvement of the U. S. Navy through extending the efficiency of the department of naval engineering in our state universities is altogether commendable and of utmost importance, as no one at present can possibly doubt.

DR. A. F. NIGHTENGALE, Superintendent of High Schools in Chicago, recently sent a circular inquiry to principals of High Schools, the purpose being to gather information as to the ratio of men to women in the High Schools of the United States. A summary of results (including neither Chicago nor St. Louis) was given in the February *School Review*, with a promise of an article by Dr. Nightengale, supplemental and explanatory, in the March number.

Specimen answers to two questions are given. To the first, "Why do you employ more women than men?" the usual answer is, "To save money; or, can get better women teachers for same money." To the question: "Why do you pay men more than women?" some answer: "We do not;" others say, "Their work is worth more;" others answer, "Custom." The real reason seems to be that men as well as women are needed, and good men cannot be had for the same money.

THE fever of insubordination and violence recently manifested in various colleges in the country is evidence that *youths* are not to be trusted as *men*. It is also evident that many American youths are laboring under the illusion that to be lawless is to be independent, and that to be brutal is to be manly. For such fevers the remedy is stern discipline.



THE WORK OF THE HIGH SCHOOL.

BY F. LOUIS SOLDAN, LL.D.,
Superintendent of St. Louis Schools.

From an address delivered at the Superintendents' meeting, Jacksonville, Fla.)

The High School is the last step in their school education for by far the largest number of the pupils. The course of study for the college classes cannot, therefore, apply altogether to the rest.

While elementary education has the pre-eminently psychological aim of developing the best powers of the child, higher education, such as the university represents, has for its aim the transmission of the most lasting spiritual conquests of mankind to minds sufficiently mature to grasp them in their fullness.

The High School in its character as a finishing school has been called the People's University, because its aim is to introduce the pupils to the spiritual treasures of the race. It is the people's university in regard to the fact, also, that its instruction is largely elementary and popular. The mode of teaching the High School pupil must differ essentially from the college method because he lacks the preparatory training which the college presupposes. The High School is a continuation of the elementary school; hence its work, while of a higher range, must be frequently elementary in presentation and drill. In the college the course may be elective; in the High School it should be largely prescribed.

The aims of High School education might be thus defined:

1. The High School should communicate to its pupils the elements of the highest culture—achievements of the race.

2. It should bring the pupil into close contact with the spiritual life of his country and his time.

3. It should awaken and widen the civic and higher human interests in

the pupil, and arouse and stimulate the desire for an active life in their service.

WHAT PRINCIPLE SHOULD DETERMINE THE COURSE OF STUDY.

In framing the course of study of a High School, three standpoints seem possible: We may consider chiefly the demands of life, or, the greatest weight may be given to proficiency in leading studies, or, highest emphasis may be laid on the growth and development of the learner and his highest interests. For the sake of brevity, let us call these the realistic, the scholastic and the ideal standpoints. It goes without saying that neither of these have ever been urged, to the exclusion of the rest, but more stress has been laid occasionally on one than on the others.

A purely realistic principle in the sense of preparing for a special calling cannot well be applied to the High School because it would require a specializing of instruction which a school for general education could not undertake. In fact, the best preparation for life is that which develops the strongest individuality, honesty and truth, good, attentive intelligence, quick-witted, thoughtful industry, and persevering power of application.

The scholastic standpoint would determine the programme of the High School by setting forth the needs of each individual study from the standpoint of the special teacher, and letting the totality of such demands constitute the course of study. The almost necessary consequence of this mode of inquiry could be foisted, since the conditions are clear. It would probably lead to an admirable and exhaustive statement of the educational needs and conditions of every study, that would be of great permanent value, and map out lines of teaching that might safely be followed.

The specialist is likely to be keenly conscious of the immense field of his science and of its relative importance compared with other branches. The imperfections of the learner, also, whom he is instructing, appear to him more glaring. He will almost inevitably be driven to the conclusion that the pupil should have better preparation before he begins his work in the High School, and that a larger share

of time should be given to it after he has commenced the study.

Unity of work is all the more necessary, because, while in the elementary school the pupil is all day long in one room and under the instruction of one teacher, he passes in the High School from room to room, and is taught by a number of persons; and the personal unity of the work ceases which instruction by one teacher implies. It is all the more necessary that a unifying principle should underlie the whole course of study.

FORMAL AND MATERIAL CULTURE.

The distinction between formal and material culture is an important one, because it recognizes that instruction in any science must serve a double end. It must, in the first place, supply information to the mind and add to the treasures of positive information; it must, on the other hand, through the mode of presentation, as well as through its content, give strength to the mind.

In High School education the dynamic forces in each study, the elements which give power, should be emphasized rather than the mere scholastic attainments. Any branch of learning thus taught gives proper preparation for life, because the soul is at once enriched and invigorated, and the strength and worth of the individual are enhanced.

High School education differs from that of the elementary school and from that of the college, yet partakes of either; it is the connecting link between the two radically different educational principles which the extremes of school education, the primary school and the university, contain. All education leads the mind to seize the world and hold it in spiritual grasp. The principal of the elementary school is that the world adjusts itself to the child in order that after a while the youth may learn to adjust himself to the world. In presenting information, we select, we arrange, we grade, we use all contrivances and devices which ingenuity may indicate to help the child seize the elements of knowledge with his yet feeble grasp. As the household adjusts itself, in a measure, to the imperious baby, so serious science and the rigid world of knowl-

edge must be modified, and altered, and rearranged, to be suitable to the childish taste and power of assimilation. At the other end of the school career stands the university, where the demand is made that the student forego all his personal inclinations, his love of ease, and compel his mental power to grasp the deepest thought, the most difficult system of science in its scientific independence, unadjusted to the feeble strength of the seeker after truth. While at the beginning of man's education art predominates over matter, the art of teaching over the material for instruction (of which little can be given at a time, with much art in presenting it), there is, at the end, in university teaching, much matter and less artifice in presentation. Midway between these two extremes stands the High School, in which a method must prevail which, while still considering the learner's difficulties, and, therefore, using the art of pedagogics in presenting a subject, lays more and more emphasis on the matter of instruction and less on pedagogical devices.

COURSE OF STUDY OF THE HIGH SCHOOL.

The High School continues, in the first place, the work of the elementary school; and, in the second place, it supplements it by an entirely new range of work.

ATTITUDE OF THE LEARNER.

In the process of learning there is a double activity. Instruction makes the external world ideal, since every step in becoming acquainted with the material things in the world means that through the process of learning, facts become ideas. Learning, however, requires not only the process of receiving instruction, but also that other kind of activity which starts with an idea and gives it external expression through language, the exercise of skill, or some kind of work. Thus we find a second element in the process of learning by which the ideal within becomes an external reality without. When the mind is receiving information the external is made internal; while any activity, writing, or drawing, or speaking, or any kind of intelligent action makes the ideal actual and external. The proper play of these two sides constitutes the fullness of the educational process. As

similation and activity, or receptivity and spontaneity are the two poles around which the world of the school must revolve. Where one factor predominates over the other too much, readjustment is needed.

Over receptivity and spontaneity, the typical activity of intelligence and will, feeling hovers as a more or less distinct echo; it is the complement of every act of intelligence and volition. These three phases of the soul—intelligence, volition and feeling—must remain the triple aim of training in the High School. To cultivate thought, energy and refinement, expresses perhaps, in a short way, the aim to be accomplished in these three directions.

TRAINING OF THE WILL.

Training of the will is, of course, implied in every kind of activity; whenever a task is imposed, whenever a lesson is studied, and the pupil has to fix his attention on it, and perhaps forego the expected pleasure of an evening to devote himself to an imposed duty, will-training is involved. As character is fixed by life in the world, so will is influenced and formed by the life of the schoolroom, which should be made to resemble closely the life-relations which surround the pupil. Another important element in the will training of the High School is the intro to an understanding of the ethical world, in Society and State. Instruction in civics has been added within the last decade to the course of study of many High Schools. Instruction in Ethics and the elements of mental philosophy would seem at least as necessary, because the principles which underlie human action are worthy of the pupil's study, and should be comprehended by him as unalterable and fixed laws, reasonable and beneficent, to which the individual owes not only obedience, but active service. Ethics, as well as civics, should be taught, because the pupil will not only be a citizen, but more emphatically, a human being; he should be led to think about his duties, and not merely know them through the routine of life.

Among the studies which are most clearly allied to the will, and which subserve the idea of making the spiritual within real without the arts of expression, should stand in a central place, extending from one end of the course to the other. There was an old definition of the difference between elementary and higher education, which

said that elementary education was to teach the pupil to absorb knowledge, while higher education was to instruct him how to communicate it. While the distinction drawn in this expression is hardly valid to-day, there is no doubt that we expect as a result of higher education improvement in expression, clearer, richer, more forcible speech, writing, more logical in thought and more correct and beautiful in form. It seems an error to discontinue altogether the practice of penmanship after the pupil has entered the High School. A good handwriting that does not offend ordinary aesthetic taste is one of the characteristics of culture, and should therefore not be neglected in High School education. As a study of expression, drawing, too, should retain its place as an obligatory study. There is a peculiar connection between studies that cultivate the art of expression and the life of the soul within. The physiological and mechanical element involved in these studies seems to open nerve-channels from the brain to the external world, by which the soul finds a readier way to manifest itself and grow in strength and activity. The study of expression is of higher than merely formal value; it reacts on all the modes of receptivity. Knowledge becomes assimilated more easily and more thoroughly when there is a corresponding activity in which it is put to use. Drawing necessitates keen observation; expression through language requires clearer ideas; thus spontaneity helps receptivity, and activity helps assimilation.

As a further study in the direction of volitional training gymnastics and calisthenics should not be denied a place.

Turning now to the side of receptivity, or to the studies in which the pupil assimilates information. Physiology perhaps should be placed earliest in the course. Its importance for the pupil renders it desirable that all, even those that leave the school after the first year, should partake of this instruction. The anatomical element in physiology should be limited, and those subjects most necessary for self-preservation (especially Hygiene) should occupy the principal place. The principal topics should be, how to take care of the body in health and disease, together with some information concerning the treatment of ordinary accidents, and perhaps some ideas in connection with nursing the sick. Life interests should predominate over scholastic interests.

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Algebra and plane geometry form the indispensable continuation of the arithmetical instruction in the elementary school. The psychological importance of algebra lies in the pure mathematical reasoning which it requires. While objective teaching is needed at the outset—when the matter is new to the child—due emphasis must be laid on that part which gives the peculiar and necessary training for which the study has a place in the High School curriculum, namely, strict and clear reasoning.

Of the Natural Sciences, botany, physics and chemistry, together with physiology or biology, seem sufficient for the four years of the High School course.

On the side of the humanities, general history should occupy a prominent place; but I would add to it lessons in United States history, of much less elementary character than the corresponding study in the elementary school. In the political life of our own day, economic questions stand in the foreground. While the elements of history taught in the lower schools give a child a good idea of the growth and development of our institutions, a maturity of mind is required for the comprehension of the economic and political questions which the pupil in the elementary school does not possess. A one-volume history of the United States, somewhat in the style of Green's History of England, with more stress laid on the last fifty years than on earlier history, would be a valuable addition to literature.

Besides Ethics, the study of the elements of mental philosophy should have a place in the High School; both on account of the peculiar training which this study gives, and also because it produces a deeper insight into those profound problems which have always formed the center of human thought. Connected therewith should be lessons in Ethics, including rules of conduct. Ethics will not make a human being moral, but it will deepen moral convictions by showing the nature of ethical obligation, and making ethical relations and principles clear and definite.

Another study in which the High School should continue the work of the grammar school, and also supplement it, is that of Art. The art-feeling is developed in the form of music in the elementary school; in the High School musical instruction should be contin-

ued, and raised to a higher level. There is another side of Art, which the High School cannot well neglect: Representative Art. If drawing lessons form part of the curriculum they should be connected with the history of ornament and historical design. The study of history of art, grouped around representative paintings, or works of architecture and sculpture, should be embodied in the course. In one form, at least, art is studied in every High School in the country—in the form of literature, of which perhaps the artistic side, the sense of the beautiful, should receive additional emphasis.

Language was mentioned before as a mode of expression; it should be spoken of as a subject of information, also. In the High School the study of grammar should be extended in two directions. It should rise to the study of style and rhetoric, and it should also trace briefly the historical development of the language. In the study of literature great progress has been made in the last ten or twelve years by bringing the children into direct contact with the great authors of the English tongue. In the selection of authors a historical principle should be observed; that is to say, that when the four years of High School reading are summed up they shall contain the typical authors of various periods of English literature; laying stress on more recent periods and reserving the few authors of olden times, Chaucer and Spencer, for the Senior year.

English literature, like the Greek, has the good fortune of having one grandest representative. Just as with the Greek boy the study of Homer was an education in itself, so for the English or American High School boy or girl, the study of Shakespeare contains the elements of the grandest literary education. While Shakespeare is read incidentally, with other authors, in every High School in the land, it seems as if he should be made the special object of study for a longer period; say, for a whole year, with two or three lessons per week in the Senior class. He is in truth all mankind's epitome. When a knowledge of literature has been obtained through three years' reading of authors, it is proper and right that the development, the law of historic progress, should be studied; and a brief history of literature seems a fitting close for the reading of authors.

At least one foreign language should be required in the High School. To be

conversant with one tongue only means to be enclosed within the more or less close walls of one civilization, without being able to look upon the human world beyond by direct inspection. The study of another tongue leads to a better acquaintance with one's own.

It has been said that an additional language means an additional soul. To the student who masters any foreign tongue a new world opens. His vocabulary becomes more copious and choice; he attains a clearness and precision in the use of English that could not otherwise be obtained. Every Latin, French or German word which he looks up in his dictionary has several English equivalents, and the choice which he is compelled to make requires a distinction between synonymous terms and kindred ideas, and makes him conscious of the finer shades of difference in their meaning.

THE DISTRIBUTION OF THE STUDIES.

The four years of the High School usually cover the last steps in the transition from childhood to manhood, with the almost sudden mental changes which this implies. This enables the High School to place at the end of its course those studies which require mature power, and which appeal to the adult's interests rather than the child's. The principles which determine the arrangement of studies may be briefly summed up as those of Importance, of Interdependence and of Difficulty or Interest. To illustrate: Physiology should be placed in the first year on account of its universal importance for the conduct of life. Algebra is placed in the first year, and Physics in the second, because the latter pre-supposes a knowledge of Algebra.

The history of English literature is placed in the Senior year because the basis for its generalizations must be supplied by the reading of authors in the earlier years; moreover, the tracing of relations between literary and historical phenomena is a fit task for the mature mind.

THE PRINCIPLE OF SELECTION.

Besides the distribution of the studies over the four years, a further problem needs consideration, namely, what part of the whole subject matter should be presented. In the inductive and political sciences, in particular, the field of knowledge is practically endless in every direction, and a law of limitation becomes a necessity. The whole field of science cannot be covered by instruc-

tion, and some principle of selection must be found. We might single out a few leading topics, e. g., 20 or 30 typical experiments in physics or chemistry; or, to illustrate in another direction, 10 or 12 authors in English literature, and teach these very limited selections with scholarly thoroughness, rendering the limited ground that is covered by instruction the type of the whole realm of knowledge beyond, and making the method used a key by which the pupil may unlock the other chambers in the house of science. If the whole realm of knowledge cannot be conquered, a part at least may be so taught that the known is the type of, and becomes the key to the unknown.

The study of natural science loses its value as a means of cultivating the faculties when the method applied fails to lead to the observation of, and experimenting with the objects of nature. The tools which Providence has given to man for his life in nature, are his senses and his hands. Instruction in science becomes unprofitable, and is contrary to nature when it is not based on the observation and activity of the pupil. Just as necessary as an acquaintance with the archetypal forms of nature by direct inspection and of the observational facts by direct experiment, is the unifying reasoning process. Not only the typical facts, but the leading lines of the whole field of the study should be surveyed.

These leading lines, however, cannot always be taught by experiment performed by the pupil himself, but he must receive some truths at second-hand through experiments which he witnesses but does not perform, and by literary communication through text-book and lecture. The total elimination of text-book study by laboratory work would be an extreme that does not commend itself. The individual scientist who does not know a hundredfold more of nature than he has learned from his own personal experimenting would be comparatively ignorant. Thoroughness in a limited field is not at all opposed to a certain comprehensiveness of information. It is in fact aided by a general acquaintance with the leading lines of the subject. These considerations will help to formulate the principle of presentation in High School work. There should be, in the first place, the thorough study of detail in connection with some typical subjects, limited in number. There should be, in the second place, the

study of leading lines and the comprehensive survey of important principles and laws. This principle is of almost universal application. In the sciences it would mean the proper combination of laboratory and text-book work, with perhaps a preponderance of the latter. In literature it would mean a preliminary study of authors, followed by the history of literature. In history it would imply a survey of general history, followed, not preceded, by what has been called the "intensive" study of some period. The proper selection for the latter purpose would be the history of the United States in its political and economic features since the adoption of the Constitution.

THE PRINCIPLE OF TREATMENT.

The tone of the High School in lessons and conduct should be manly. The instruction and discipline which it imposes should be worth a man's time to give or take, and worthy of adult intelligence and effort. In handing the treasures of learning to the little child of the elementary school, the teacher has to stoop so that the child may be able to reach his gifts. In teaching mature youths, the teacher must stand erect and cause the youth to lift himself toward the gift held out to him from the height of manhood. Thus only will he learn to grow. The lower classes of the High School still represent childhood, the older classes the youthful adult. The method of teaching should correspond to these conditions of nature, and rise from elementary and early beginnings to scholarly interest and effort. A manly tone should permeate the whole school. The duties of citizenship should be distinctly foreshadowed by the spirit of the discipline. While the teacher's Will was largely the rule of the elementary school, the governing powers of the High School should be obedience to reasonable law, based on the exigencies of the work, and a proper respect for the rights of others. The impersonal rights of others. The impersonal element of law gradually supersedes personal authority. In instruction, too, the tone should be manly. The High School pupil shows in his social life instinctively where he belongs. He gravitates naturally toward the adult. The boy or girl seeks more freely the society of those older than himself. His relation to his parents changes from submission to companionship. The circle of his interests coincides more and more with that of the adult. His home

life has changed, and he is charged in not a few cases with the duties and responsibilities of a grown person. School had better recognize these facts of life and turn its steps in the same direction. The age of the High School pupils, advanced as our statistics show it to be, suggests their treatment. They will be as old when they finish the course as the college graduate was a few generations ago. A glance at the biography of any of the eminent Americans of the earlier part of the century shows this fact. Motley and Bancroft graduated at the age of 17; Longfellow, Emerson and Whitney, the philologist, graduated from Bowdoin, Harvard and Williams colleges at 18; Daniel Webster and Charles Sumner of Dartmouth and Harvard, at the age of 19.

High School education, if the unjust charge were true that it kept youth away from the interests of life, and made him insensible to its pulsations, because it locks him up in the world of the past, and of scholastic and unreal abstraction, would indeed tend to unfit for life and be a failure. The opposite course is the one which the High School should pursue with the graduate of the elementary school. It should aim at bringing him into the closest touch with the highest interests of current life, and to fill him with a strong desire for activity in the world of reality.

During the years that a pupil is in the High School, the saying of Terence should apply to him: "He is a man and nothing that relates to man should be without interest to him."

THE *School Journal*, (New York), concludes a thoughtful editorial on "Men as Teachers" with the following paragraph:

"There is a tendency to a reaction against what might be termed the over-employment of women as teachers; not that they have lacked in faith, fitness and skill, but that men have been endowed by their Creator with especial power to teach their own sex. Not to avail themselves of these powers would be a mistake on the part of those who aim at the highest efforts regardless of the question of sex."

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VALUE OF HISTORICAL READING.

BY GEORGE E. SEYMOUR, LL. D.

I.

The question is often asked: What use to any individual is a knowledge of the facts of history? What bearing upon everyday life has such knowledge, or in what way does it promote the happiness or contribute to the success of its possessor? Any satisfactory answer to these or similar questions must depend largely upon the intelligence of the questioner; for no answer can meet the needs of all grades of intellectual development.

The study of history is one among the many educational devices for extending the range of mental vision, for invigorating the mental faculties; for maturing the judgment; for intensifying our human sympathies; for improving our logical powers and our power of verbal expression.

To what extent any or all of these results are realized must always depend upon what we read, how we read and the capacity of the reader for improvement. It need not be argued that candid and capable minds are certain to derive great benefit from reading history. To argue such a question would be to impugn the intelligence of our readers; but it may not be so obvious that the student of average ability and earnestness is likely to find in historical studies these, or any other, benefits sufficient to warrant him in giving such studies any considerable attention.

Reading history merely to satisfy curiosity, or to seem well informed, will go but a little way toward achieving the results named. The time and money wasted on these purposes is something prodigious in the field of literature, and the meager results

of such reading have had much to do in inspiring doubt as to the value of reading history at all.

II.

There are those who think that history has no use, and there are those who think that history has many uses. Were we compelled to choose between the two, we would choose the latter alternative; and evidence is abundant in support of the following propositions:

1st. The study of history calls into active operation, and, therefore, cultivates memory.

2d. The study of history sharpens and strengthens the reasoning powers.

3d. The study of history cultivates the imagination.

4th. The study of history strengthens and matures the judgment.

5th. The study of history extends the horizon of our intellectual vision.

6th. The study of history cultivates the habit of sound and comprehensive generalization.

7th. The study of history cultivates the habit of clear, concise, vigorous and polished expression.

8th. The study of history inspires a love for knowledge by contact with the great thoughts of the great men of all ages.

9th. The study of history confirms our confidence in the value of right conduct by the steady, though sometimes tortuous, advance of nations along those lines of development which lead from barbarism to civilization.

10th. The study of history gives us a deeper insight into the motives which underlie human conduct, and a wider command over those instrumentalities which constitute the most potent factors in molding and directing human conduct and building up human character.

III.

History has its moral lessons, as well as its lessons of a social and political nature; and rules for regulating human conduct can be deduced in abundance from its rays. And one of the many general lessons which history teaches is: That when any people sink to a condition in which integrity is held to be ridiculous, and common modesty is treated with contempt, the moral vitality of that people is at a low ebb, and its regeneration is quite impossible, except by means of some political or religious convulsion. History teaches, too, that if men would follow their reason, instead of following their impulses, in determining their rule of action, many social and political disasters which, from time to time, overwhelm us might be avoided, and many human lives which now find a tragic end would be made both happy and useful.

History teaches that, having been led astray by our impulses during many centuries, great revolutions, social, moral, political and industrial, seem necessary to assert the supremacy of right over might; to assert the supremacy of intelligence over prejudice; to assert the supremacy of the people over the usurpations of authority; to herald new ideas and larger liberty by furnishing new interpretations of old facts, and by the exposure of fallacies involved in old theories.

The establishment of these propositions will leave the value of historical studies no longer in doubt.

St. Louis, Feb. 20, 1896.

Spring goods arriving daily at the big store, Famous, corner Broadway and Morgan. A walk through the store is a pleasurable and profitable experience

FURTHER THOUGHTS ON SIMPLICITY.

BY OTTO M. SANKEY.

Your editorial on simplicity in February number has been quite suggestive, and with your kind permission I will undertake to draw out a few points of special importance.

In the first place, I beg to observe that while things are naturally complex because divisible, mind is ever simple, and so is thought. For we must note that it is mind whence originates the complexity of things and of human knowledge. However we may take the universe into view, there is one idea running through it all. And this idea is infinitely simple. It is pure being and pure art. Therein are no germinal processes. The possible must necessarily be preceded by the actual, both as precedent to the possible and as the motor to the latter's entering existence. This latter, then, must be complex, since at least two factors are essential, substance and a form-giving power. Hence complexity arises through defect.

A lucky thought it was to designate metaphysics as a more than usually obstinate attempt to think clearly. Let us try it on the following knot: Is the absolutely simple the absolutely nonexistent, and can we in that light convert unity and simplicity? I do not see how we can have the idea of a one, of unity, without (supposing at least) some concrete form or letter, said eus rationis. And while unity simply refers to number without regarding substance, simplicity also takes the substance in view. Hence a simple being is but of (not composed of) one, and hence indivisible substance. More than this, space relations do not and cannot affect

it, since, being indivisible, both mechanically and chemically, it occupies no space. And this being in its highest sense, and of which we can be fully conscious is—God. All else, it is true, is relatively complex, since the universe, with all its numberless variety of phenomena and processes, imitates Him and depicts His intentions. He is prototype; all else is ectype.

Again, with regard to simplicity of knowledge and relative degree of complexity, it is but fair to say that the first glimmerings of reality without are but made up of two items, being and thing. Later on the scale is turned to thing and being. These first aspects are truly simple considered for themselves, because most general; being covering all existence, and thing the next subgenus, material existence. Being practically, though not in human experience, exists without necessitating the thing; but the thing cannot be without the being, though human theory may invent. (The intelligible movements of a thing never make a thing). But it is this, by the combination of being and thing, that the first complexity results, since the first is given to the latter. Now, it does not lie within the child's bosom to conceive of this or that thing out of its own mind, but to seek for the what and why when the thing has been noted, and this, through complex process, leads to the simple, as it begins therewith. The more true philosophy, i. e., that based equally both on a priori and a posteriori principles, nears the ultima causa rerum, the simpler it becomes. The things drop from view and being, self-active being remain. All other things resolve themselves into accidentals, conditions and occasions.

This is not without analogy in the everyday world, and especi-

ally at school. Take the most complex thing you please, and you will find a central connecting idea running through all, and about which all else clusters. It is this that is the true text of a teacher's ability so to keep the pupil in his study as never to lose sight of that connection. The complexity of function, whether in the abstract, as in mathematics, or in the concrete, as in the natural sciences, leads in either case to the simplest end, infinity. I would indeed, feel sadly disappointed if this were absolute zero. And then is the soul a physically divisible, and hence complex thing?

There is yet another point. Every idea is simple. Take the notion of red, blue, strong, etc., from the concrete, or just, true, kind, from the abstract, and what do you have? Simplissimum simplicium. That these ideas enter into the complex relations of things and of man does not alter the case. Again, all individual notions and concepts are simple, for each is one for itself, and finds no exact identity anywhere. Were this principle more universally observed, teaching en masse would soon cease.

Now, to teach in a simple manner means to hold the one central idea of the subject always before the mind. In teaching fractions let the thought be foremost that the whole process is but retrogressive, based on the divisibility of one (1), the end being unity and never zero; when, for example, teaching ocean currents in geography, let the idea of thermal influence be foremost; in algebra, that we may assume a name for any so far indefinite quantity, one of the simplest ideas of all. That younger pupils become perplexed at such an indefinite notion, lies in the fact of their having started in the complex, and thus finding it difficult to have a notion with-

out a tangible concept. All training and schooling, both in early and in later life, tends to simplify, i.e., not only to make things appear simple from our having mastered them, but really so, and in their essence.

If some of my thoughts seem somewhat obliquely to those expressed in the Journal, it is hoped this may serve to arouse yet more earnest thought on this weighty problem, *Simplicity*.

[PROF. SANKEY'S last word admits that the "problem" of "Simplicity" is a "weighty" one. But to admit that it is a problem at all is to admit that the very idea of "Simplicity" is full of complexity," which was the central point in the editorial in question.

His contention that "mind is ever simple and so is thought," will find little to confirm it in the history of speculative inquiry. Indeed our correspondent's whole difficulty appears to arise partly from a failure to distinguish with sufficient care between the *complex* and the *compound*, and partly from misapprehension of the true relation between *unity* and *multiplicity*. Mind is not compound (and hence dissoluble); it is complex—a self-differentiating one, which by that fact is also *many*. Further, a "complex sentence" is certainly the objective form of a complex thought, which nevertheless is *one* whole thought. And even the "simplest" sentence is still a sentence only as being at once subject and predicate—the unity of diverse elements. *E Pluribus Unum* is, in fact, not merely the motto of the American nation, it is the universal formula of the Thought of the World.

To those who have not disposed of this difficulty of the relation of the Simple to the Complex, and of Unity to Plurality, we commend Plato's *Parmenides* as a dissolvent, and Hegel's *Logic* as a solvent.—EDITOR.]

ADMIRAL FARRAGUT.

The Secret of His Success in Life— A Talk to Boys.

BY WILLIAM A. MOWRY.

Few men, probably, of late years have had a nobler reputation, stood higher in their profession or fairer before the world than Admiral Farragut, whose statue has lately been unveiled in Washington. Let me tell you a little incident which throws great light upon his career, from which many lessons may be drawn, but from which I will only ask you to notice the underlying principles which brought such signal success to his life.

In a recent conversation, Admiral Farragut said: "When I was ten years of age I was with my father on board a man of war. I had some qualities that I thought made a man of me. I could swear like an old salt, could drink as stiff a glass of grog as if I had doubled Cape Horn, and could smoke like a locomotive. I was great at cards, and fond of gaming in every shape. At the close of dinner one day my father turned everybody out of the cabin, locked the door and said to me:

"David, what do you mean to be?"

"I mean to follow the sea."

"Follow the sea! yes, to be a poor, miserable, drunken sailor before the mast, be kicked and cuffed about the world, and die in some fever hospital in a foreign clime."

"No," said I, "I'll tread the quarter-deck, and command, as you do."

"No, David; no boy ever trod the quarterdeck with such principles as you have, and such habits as you exhibit. You'll have to change your whole course of life if you ever become a man."



FARRAGUT.

"My father left me and went on deck. I was stunned with the rebuke, and overwhelmed with mortification. 'A poor, miserable, drunken sailor before the mast! Be kicked and cuffed about the world and die in some fever hospital!' That's my fate, is it. I'll change my life, and change it at once. I will never utter another oath; I will never drink another drop of intoxicating liquor; I will never gamble. I have kept these three vows to this hour. Shortly afterwards I became a Christian. That act was the turning point in my destiny."

Now, my young friends, what underlies this story? What do you discover besides the simple narrative?

As I read this incident, and read it, and pondered upon it, a profound impression of its hidden meaning, of its deep significance, came over me. I could "read between the lines" something not printed on the page. I saw plainly stated three important principles; and still further on three more were discovered. The first three were the fundamental principles of success, the foundation upon which the superstructure of a useful and prosperous career was builded. The second three were like unto them, and without which the first would have been rendered null and void. I read (1) that Admiral Farragut had a good character. Ah! boys, character is of primary import-

ance. We can none of us achieve much worth achieving without a good character; that which can be depended on in an emergency; that which is pure and bold and true and good. Then (2) I notice in his life, as it has been placed before the world, that Admiral Farragut had real ability—intellect, mind, brains. He was no commonplace man in his mental caliber. He had talent. He also had (3) ambition. He could never have acquired the world-wide reputation he did without a high and noble ambition. He proposed to accomplish something worthy in life, and he did. Had he not had a laudible ambition, he would never have made such a brilliant record.

But these three important points are not the only ones that stand out in his life. Three other qualities are apparent. It is clear that Admirable Farragut could never have gained his remarkable reputation without hard and laborious service. He had the quality of (1) industry. He improved his opportunities. He became familiar with all history that related to his profession. It is related of him that, during a year's residence in Tunis, our Consul, Mr. Charles Folsom, directed his studies, and "gave him a thirst for information," which, as Mrs. Farragut says in a letter, "as his eyes are not strong, kept all his household busy reading to him." His knowledge was varied, and in matters relating to his profession profound. He was one of the best linguists in the navy. Success comes not from chance, or from talent alone. It is won by fighting for it. It is achieved. No great thing is done, no great prize won, no remarkable success attained, without hard work.

But I have known hard workers not to succeed. I have in mind several boys of my acquaintance

who work hard enough. They will fire up like a rocket, and make a bluster and a sputtering, and go off with a whiz and a whir which you would think sufficient to move the world; but soon the light goes out suddenly, and the result is a burnt stick. They are at work to-day on one thing and to-morrow on another. They lack (2) perseverance. Not so, however, David Farragut; he had not only industry, but he had persistence; he was steady, earnest, persevering, year in and year out; he worked on quietly and faithfully till he had risen from midshipman to lieutenant, commander, captain and rear admiral. Still there is lacking one other element to his success. He had labored faithfully and perseveringly for many years and had acquired no great reputation, no fame. He had not made a great name, but he had (3) patience to wait for the results.

The war finally came, and he was thrown into actual service. He could now exhibit the qualities he had been acquiring during the long years of peace. He was now tried and was not found wanting. He had entered the navy before he was ten years old, yet he was past sixty when he found the opportunity to distinguish himself by exhibiting those qualities and that breadth of judgment which had been so long maturing. Ah! my young friends, we must learn to be patient and to wait for results. They will come in God's good time. Many a young man wants to jump at one bound to the top of the ladder; yet that is a dangerous experiment. It is better to climb one round at a time, and the longer the ladder the higher our continued climbing brings us.

Now, Admiral Farragut had (1) character; (2) ability; (3) ambition; and he had also (1) industry;

(2) perseverance; (3) patience. He won great distinction, and, since there was no proper rank in the navy for him, the grade of Admiral was created for him whose name had become a household word throughout the land. He died as he had lived, a Christian gentleman, and mourned by the whole nation. In battle he was as fearless as Nelson, in public virtue and patriotism not excelled by the greatest heroes of antiquity, while in his spotless purity of character he rivaled the illustrious Collingwood. There are many naval names dear to the American heart, but

"A brighter name must dim their light

With more than noontide rays—
The viking of the river fight,
The conqueror of the bay.

Shape not for him the marble form,

Let never bronze be cast,
But paint him in the battle storm,
Lashed to his flagship's mast.

Let me assure you, one and all, that any young man to whom God shall give life and health, if he displays these six attributes in due proportion and extent, is just as sure of success in life as the sun is to rise to-morrow morning.

One may attain fair, or even brilliant success in some direction without a harmonious development of all six of these attributes, although it is by no means sure. But one who has all of these qualities need give himself no uneasiness as to results. They are certain; but let him patiently bide the time.

Teachers in the public schools, when do you buy your wearing apparel? Famous, corner Broadway and Morgan, make an extraordinary bid for your trade. In addition to offering you the largest assortment, greatest variety and absolutely lowest price, we offer a special discount to teachers in the public schools and open accounts with them. Our Economy Basement is chock full of snaps in the way of house furnishing goods, china and granite wear. Famous, corner Broadway and Morgan.

COLLEGE AND UNIVERSITY NOTES.

MISSOURI BIBLE COLLEGE.

As State Education becomes more and more thoroughly organized and perfected it would seem but manifest destiny that private and denominational schools should become correspondingly reduced in number. Meanwhile the denominational school, as has already been urged in this Journal, has a valid ground of existence. But also, as was argued, the characteristic value of the denominational school is in the religious atmosphere which finds its natural focus in the theological department.

On the other hand it is, as every one knows, one of the chief criticisms upon state schools, that they ignore the religious element and thus at least bear the appearance of being "Godless schools." One significant practical answer to such criticism is presented in the founding of the theological schools by the various denominations in connection with the State University. As that institution develops into its true character and strength as the natural organic center of all the educational interests of the state, it is but inevitable that in its total attendance each of the leading denominations will be represented by an increasing number of students.

At the same time it is evident that the several denominations can safely rely upon the State University to furnish the best possible facilities for the whole range of education in its secular character. Hence they can each with perfect security concentrate whatever money and talent they may have at their disposal for educational purposes in the building up of a strong theological school in immediate connection with, while yet wholly independent of, the great State University.

What appears so reasonable upon the face of it could hardly fail of actual realization; and the recent establishment, by the Church of the Disciples, of a theological school in connection with the University of the State of Missouri can only be looked upon as the first step in the process of grouping theological schools of all denominations around that natural center. And such close connection cannot but result in increasingly pronounced open communion on the various sects, to the enlarging

of the views and to the softening of the tempers of all concerned.

As pointed out, too, by Dr. Jesse, President of the State University, in his happy address at the opening of the school, this is not a new experiment. Such schools have for many years been known in England, in Canada and in America. And we may add that no other single movement would seem to promise so much in preparing the way for the practical federation of all—at least of all the Protestant denominations of the one great Christian Church.

The President of the new "Bible College," Elder W. T. Moore, D.D., is a man of extended scholarship and large experience, and the whole enterprise appears predestined to abundant success.

(We are indebted to the *Columbia, Missouri, Herald*, for a full account of the inauguration ceremonies.)

THE University of the State of Missouri has issued in handsome quarto form a pamphlet of some fifty pages giving the order of exercises and addresses on occasion of the dedication of the new buildings of the university last June.

STATE UNIVERSITY LIBRARY.

REV. J. W. MONSER, the librarian of the university, reports the library to be in a flourishing condition. There were sixty-one volumes saved out of the fire. Since the fire there has been added some 20,000 volumes and the number is being daily increased.

The library is one of the finest equipped in the United States. The book stacks are of the latest design, having been patented less than a year ago by Wilson Brothers, of Chicago. The shelves are so arranged that the height may be adjusted by a key. With the exception of one private library there is no other of the kind in the state.—*Missouri Statesman*, (Columbia.)

The University of Tennessee has secured a very valuable part of the Educational Exhibit from the dismantled Exposition at Atlanta. Some of this material was given by the Government, but a large part was presented by firms and schools making exhibits. The university has a flourishing normal department, and it is in connection with this department that most of the material will be used.

SCHOOL NOTES.

THE Perry lecture course in Art, given in the Auditorium of the St. Louis High School, has proven a very gratifying success. The movement is due to the active energy of the moving spirits of the Art Section of the Wednesday Club in general, and to Miss Fruchte, Mrs. Riley and Mrs. James A. Harris, in particular. The first lecture given by Mr. Perry was under the auspices of the St. Louis Society of Pedagogy at its regular monthly meeting, Feb. 17th. After music beautifully rendered by Mr. Robyn, Miss A. C Fruchte—whose name was on the committee's regular programme for this evening, but who asked to have Mr. Perry's lecture substituted for her own—gave a short and effective talk, referring to the work of the Wednesday Club and to that of the Society of Pedagogy, following which came the lecture by Mr. Perry, of the Pratt Institute, New York. The feature of the lecture was the pointing out of the artistic merits of a large number of pictures thrown on a screen. In his other lectures Mr. Perry outlined in a way altogether admirable the historical development of architectural forms.

MR. W. W. BALDWIN, of Burlington, Ia., is a notable man, whether considered as a lawyer, as a business man, or as a public-spirited citizen. Within the year a published address of his on the monetary standard set us wondering why the people of the Burlington District allowed him to remain out of Congress. Recently another address by him deals in a very forcible way with the practical problem of "Common English." Mr. Baldwin is, in fact, a member of that still more important congress, the Board of Education, and his address to the Burlington teachers ought to be in the hands of everyone in charge of a school-room, whether in country or in city. Language is sacred as the form of thought which is one of the subtlest modes of the mind. Accordingly slang can be nothing less than a desecration, a profanation; above all as coming from a teacher.

COME and take a walk over the largest clothing store in the world. Famous, Broadway & Morgan.



ARBOR DAY.

On account of the great diversity of climate in the various States, no one day can be appointed that can properly be observed by all the States at the same time. Whatever day you use, do not wait until the trees are covered with green leaves and then attempt to transplant them. It may be well to have your celebration on the regular Arbor Day, but have your tree planting before the buds burst, and then make your celebration party a dedicatory service.

In Missouri Arbor Day falls on the first Friday after the first Tuesday in April. Illinois will celebrate Arbor Day this year in April. We trust that this Arbor Day of 1896 may add new beauties to the grounds of each and every school in this country, and that seed may grow, plants thrive and trees flourish most abundantly.

State Superintendent Hon. Henry Sabin of Iowa, in his excellent Arbor Day Leaflet, well says:

"Arbor Day has two missions—one of tree planting and one of nature study. Wherever there is a barren, desolate piece of ground called 'the schoolhouse yard,' there its mission is to plant trees and shrubs; to care for them, and to teach the children to love the trees they plant as one friend loves another. There are hundreds of such yards which need to be made beautiful and attractive to the children. Select a thrifty young tree, such as grows most luxuriantly in your section of the State, and ask some one who knows how to direct you in planting it. Interest the children in caring for it, that it may get well-rooted before the dry summer months come on. Every such tree planted by you, if it lives and grows, will prove a blessing to the district and State."

"The other mission of Arbor Day is broader and reaches out into the entire realm of nature. Its exercises should be such as in after years will awaken pleasant memories and recall the associations of a happy childhood. Nature is many sided. She reveals her beauties in a thousand varied forms.

To lead the child 'to look from Nature's God' is the work of a teacher who himself knows her secret ways and her pleasant paths.

"The spirit of Arbor Day should remain throughout the year. The exercises should be made to minister to building the character of the child. Character is always fashioned after some ideal. This should be the tendency of nature lessons, to form the right ideal of truth, reverence and worship, as well as of knowledge. If it is not, then the golden opportunity is lost."

Arbor Day Song.

(Tune—"Battle Hymn of the Republic," or "John Brown.")

In the ground we plant the rootlets of the future forest trees,
And we leave the slender saplings to the sunshine and the breeze
And the gentle rains of springtime—
and we trust that all of these
Will make the trees go on!

Chorus—

Let us plant the trees together,
In the mild and balmy weather.
May their branches wave forever!
God make the trees go on!

In the friendly mold me muffle all the tender little feet,

They will creep into earth's bosom,
drinking juices strong and deep,
That will pour life-giving currents,
making twig and leaf complete,

While the trees are growing on!

Chorus.

God will send his gracious sunshine,
and his benisons of dew,
And the sky shall bend above them with its depths of arching blue,
And the rain refresh their life-blood with a richness ever new—
The trees will still grow on.

Chorus.

Let the raging storm but strengthen as the branches toss on high;

Let the trembling leaves, as praying hands, be lifted to the sky;

Let the thankful birds that haunt them swell the chorus joyfully,

And the trees grow grandly on!

Chorus.

—Sara F. Archer, in Exchange.

Talking in Their Sleep.

"You think I am dead,"
The apple tree said,
"Because I have never a leaf to show—
Because I stoop,
And my branches droop,

And the dull gray mosses over me grow

But I'm all alive in trunk and shoot;

The buds of next May

I fold away—

But I pity the withered grass at my root."

"You think I am dead,"

A soft voice said,

"Because not a branch or root I own,
I never have died,

But close I hide,

In a plumy seed that the wind has sown.

Patient I wait through the long winter hours;

You will see me again—

I shall laugh at you then,

Out of the eyes of a hundred flowers."

—Edith M. Thomas.

Child and Tree.

I'm like the tiny tree

The children plant to-day;

And not to blame, you see,
For making no display.

To grow we both have room;

And so we patient wait;

And some day may become
An honor to the State.

The tiny little tree

Can never move a pace;

But busy as a bee,

I flit from place to place.

Because that I am free

To study and to know,

There's more required of me
Than standing still to grow.

I move and bring things near;

The tree must stand and wait;

But each one in his sphere

May grow both good and great.

—E. A. Holbrook, in Educational Gazette.

A Little Planter.

Down by the wall where the lilacs grow,

Digging away with a garden hoe,

Toiling as busily as he can—

Eager and earnest, dear little man!

Spoon and shingle are lying by,

With a bit of evergreen, long since dry.

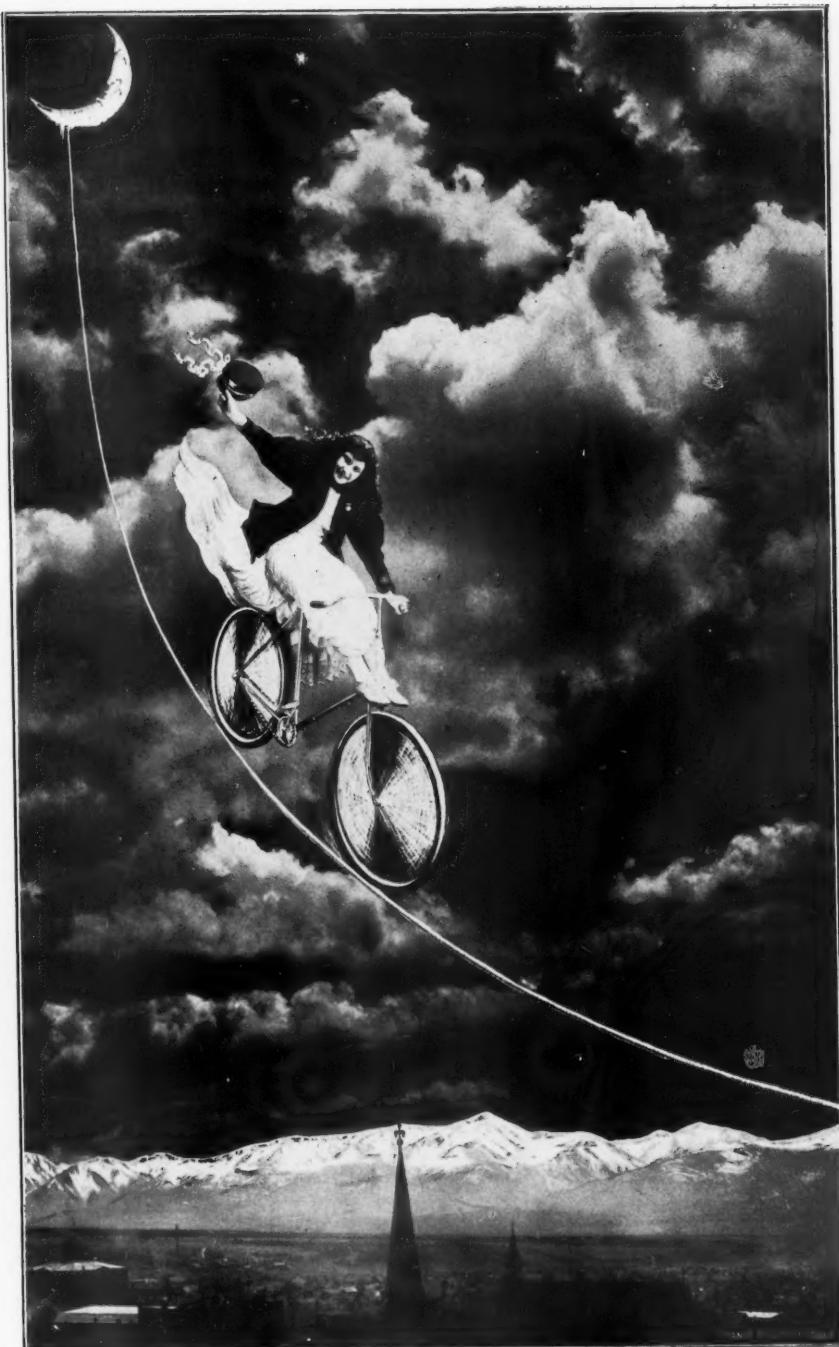
"What are you doing, dear?" I ask.

Ted for an instant stops his task,

Glances up with a sunny smile,

Dimpling his rosy cheeks the while;

"Why, it's Arbor Day, you see,



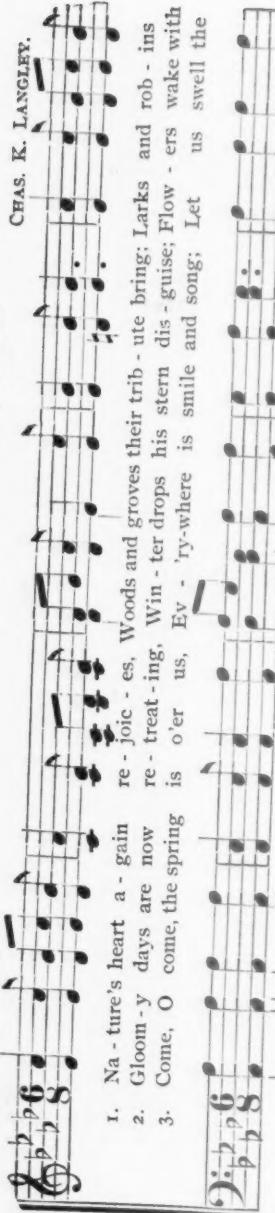
Half-Tone Engraving
By Sanders Engraving Co.,
St. Louis, Mo.

COASTING IN CLOUD LAND.

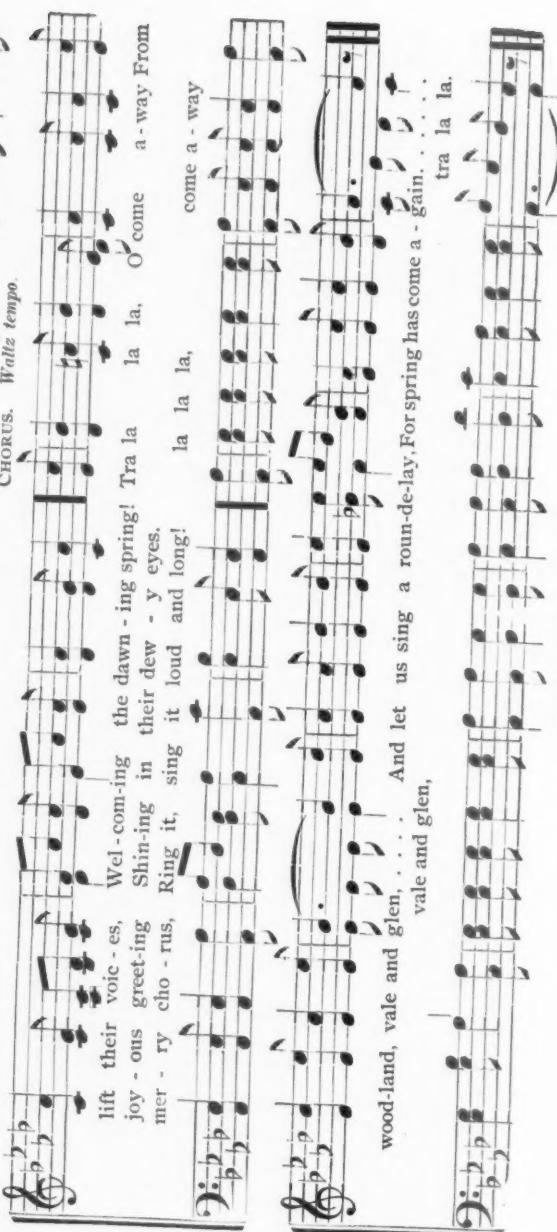
Photograph
By O'Keefe & Stockdorf,
Leadville, Col.

NATURE'S HEART AGAIN REJOICES.

CHAS. K. LANGLEY.



CHORUS. Waltz tempo.



wood-land, vale and glen, . . . And let us sing a roun-de-lay, For spring has come a - gain, . . . tra la la.

FROM GOLDEN GLEES.
By Permission of A. Flanagan, Publisher, Chicago.

And I'm planting a next year's Christmas tree;

"For last year, auntie, Johnny Dunn Didn't have even the smallest one; And I almost cried, he felt so bad, When I told him 'bout the splendid one we had;

And I thought if I planted this one here, And watered it every day this year, It would grow real fast—I think it might;

(His blue eyes fill with an eager light), And I'm sure 'twill be, though very small,

A great deal better than nothing at all."

Then something suddenly comes between

My eyes and the bit of withered green, As I kiss the face of our Teddy boy Bright and glowing with giving's joy. And Johnny Dunn, it is plain to see, Will have his next year's Christmas tree.

—Youth's Companion.

What Do We Plant?

What do we plant when we plant the tree?

We plant the houses for you and me. We plant the rafters, the shingles, the floors,

We plant the studding, the lath, the doors,

The beams and siding, all parts that be;

We plant the house when we plant the tree.

What do we plant when we plant the tree?

A thousand things that we daily see. We plant the spire that out-towers the crag,

We plant the staff for our country's flag.

We plant the shade, from the hot sun free;

We plant all these when we plant the tree.

—Henry Abbey.

Famous, corner Broadway and Morgan, prides itself on the great variety and splendid assortment of its cloaks, wraps, dresses, corsets and underwear, hosiery, gloves, millinery, and notions. We would be pleased to have the public school teachers of St. Louis come and take advantage of our special discount to teachers, and will gladly open an account with you. Come and take a walk on the largest clothing floor in the world. Famous, Broadway and Morgan.

ARBOR DAY.

BY JOHN R. KIRK,
State Supt. Public Schools.

Friday, April 10.

Editor American Journal Education:

Arbor Day in Missouri this year is April 10. This is determined by section 8,010 of our Statutes, which is as follows: "The first Friday after the first Tuesday in April of each year is hereby set apart as Arbor Day for this State, and all teachers, pupils and patrons are requested to observe the same in their respective school districts by encouraging the planting of trees, shrubbery and flowers upon and around the school house grounds of their districts, that such grounds may be rendered pleasant and attractive—a part of the day to be devoted to literary exercises having special reference to the work in hand, as the teacher or committee in charge may direct, and the afternoon to be devoted to the improvement and ornamentation of the school grounds."

It is to be hoped that the teachers and the pupils of the State will, as far as possible, celebrate the day with appropriate exercises.

Nothing, I think, marks more painfully the lack of true educational sentiment than a naked and barren school ground.

If Arbor Day were given over entirely to cleaning up the school grounds, repairing the fences, setting out trees and flowers, and sowing grass seed, the day would become a green spot for life in the memory of the children. If the parents and friends of the children would come to the school house with well-filled lunch baskets and take a holiday with the children, it would make the day even more profitable, enjoyable and refining.

I believe in cultivating good, wholesome sentiment as we go along, and a well-spent Arbor Day celebration will help to do this.

A BUSINESS PROPOSITION ADDRESSED TO SCHOOL BOARDS.

I desire to call the attention of the School Directors of Missouri to a fact commonly overlooked. It is this: A well-shaded and grassy school ground is more than a matter of sentiment. It

is a question of hygiene, a question of the health of the children. For sanitary purposes, at least one-half of every school house yard should be covered with grass and shade trees.

As a purely business proposition, I wish to recommend to every Board of Directors in the State that a sum of money be set apart this spring and every spring for the purpose of properly protecting their school house playgrounds by setting out trees and sowing grass seed.

The school ground in many parts of Missouri can be sodded without spending a cent of money, by simply gathering from the bottom of a manger in which timothy hay has been fed a few baskets full of seed and litter and scattering the same over the school ground in the early spring. Usually a good sod will be formed in two or three seasons. Good trees, however, usually cost money. But they are worth money.

I really think the Board of Directors in every school district ought to oversee and control the whole matter as to the sanitation and ornamentation of the school premises.

CATALOGUE OF FOOD PLANTS.

1. Mountain ash—cousin to the pear, which, engrafted upon the ash, produces good pears.

2. Roxbury waxwork—ornamental shrub; beautiful in fruit.

3. Japanese quince—fruit quite like an apple, and fragrant; an ornamental shrub, very beautiful in flower.

4. Barberry—fruit edible; much used as an ornamental shrub; leaves take on beautiful autumnal tints.

5. Dwarf crab-apple—fruit edible, but mostly used as an ornamental tree.

6. Honey locust—pod-bearing, the beans of which are embedded in a very thick, sweet fluid, hence the name; notice the long, sharp spines; an ornamental tree.

7. Kohlrabi—a member of the cabbage family; an edible.

8. Tomato—a member of the nightshade family, like the potato. The fruit, used in many different ways, is delicious; notice that the part we eat grows on its branches, while the potato grows on the roots.

9. Seed-bearing carrot—good for both man and beast.

10. Indian corn—native of America; might well be our national plant; it is of world-wide importance, on account of its commercial value; amount raised in 1870 more than 1,000,000,000 bushels.

11. Asparagus—belongs to the lily family; young shoots much eaten; leaves and berries beautiful.

12. Cotton plant—“Cotton is king.” Why? Commercial value of utmost importance in the United States; 2,000,000,000 pounds have been raised here in one year; one-half the people of the world wear nothing else, while the other half use it in part.

13. Chestnut—a common tree in Massachusetts; fruit excellent; wood used much in the arts.

14. Branch of maple with fruit. This one kind holds its fruit during winter, a blessing to birds and squirrels.

15. Black walnut and butternut—the trunks of the former used for valuable furniture; the fruit of both rich and nutritious.

16. Peanut—notice that the fruit is at the root; commercial value great.

17. Garget—used as medicine and as an ornamental shrub in old-fashioned gardens.

18. Bamboo—used in making fishing rods and articles of furniture.

19. Cocoanut palm—notice husk cover of nut; notice leaf.

20. Cork elm—a curious ornamental tree; notice leaf.

21. Hawthorne—notice spines; used as an ornamental shrub; beautiful in flower and fruit.

22. Horsechestnut—beautiful, ornamental tree.

23. Persimmon—belongs to the ebony family; bark used as medicine, and fruit used as food; grows in tropics mostly.

24. Castanea—chestnut fruit, or nuts, of great commercial value and well known.

25. Castor oil plant—a beautiful, ornamental shrub, from the fruit of which castor oil is obtained.

26. Hops—used in brewing and sometimes in making yeast; grown as an ornamental, climbing vine.

27. Tulip tree—wood much used by cabinetmakers and carpenters. It belongs to the magnolia family; notice that each leaf looks as if cut off at end.

28. Flax—all articles of linen are made from its fiber, linseed oil from its seeds.

29. Yellow wood—a pod-bearing tree, the wood of which is much used in the finishing of interiors.

30. Catalpa—bears large, cylindrical pods; an ornamental shade tree, and very beautiful in flower.

31. Shagbark hickory—wood very hard, tough and much used for tool handles; nuts of much value.

32. Beechnut—wood used for fuel; nut delicious; stores of them laid by by squirrels to eat in winter.

33. Buckeye, horsechestnut—beautiful, ornamental shrub.

34. Magnolias—has medicinal properties, but is most esteemed for its beauty. It is in full flower before leaves appear.

35. Brazil nut—grows in Brazil and other warm countries; notice the hard shell in which the seeds grow, for these seeds are the nuts.

36. Oats—247,000,000 bushels in one year in the United States; used in various ways for food; see how beautiful it is as it grows.

37. Wheat—235,000,000 bushels in the United States in one year; more than any other country; used as food in a dozen ways.

38. Barley—used for food for both man and beast; it is a beautiful plant; this shows how it looks growing.

39. Potatoes—114,000,000 bushels in one year in the United States; a native of America; one of the most important plants cultivated for food and for starch.

40. Rice—see how beautiful a plant; feeds more people than any other plant in the world.

41. Grasses, or hay—24,000,000 tons raised in one year in the United States; corn and bamboo belong to the grasses.

42. Buckwheat—a native of Asia; a curious plant used in various ways for food; notice it carefully.

43. Manna—supposed by some to be the manna eaten by the Children of Israel; the pod full of beans is more than two feet long.

44. Spanish moss—grows on trees in Southern States and other warm places; the inner part resembles horse-hair, and is used in cushions, pillows, etc.—Journal of Education.

GEOGRAPHY OF YOUR STATE.

(Adapted from Educational Courant.)

Organization:—

As Territory.
As a State.

DISFIGURING HUMORS



Prevented by
Cuticura
SOAP

when all
Else
Falls

CUTICURA SOAP purifies and beautifies the skin, scalp, and hair by restoring to healthy activity the CLOGGED, INFAMED, IRRITATED, SLUGGISH, or OVERWORKED PORES.

Sold throughout the world. British depot: F. NEWBERRY & SONS, 1, King Edward-st., London. POTTER DRUG & CHEM. CORP., Sole Prop., Boston, U. S. A.

Date of admission to the Union.

Position:—

Absolute—latitude and longitude.
Relative to its boundaries.

Size:—

Relative area, length and breadth.
Waters:—

Name and locate its largest rivers and lakes.

Cities:—

Capital. Metropolis. Name and locate principal cities, telling what makes each important.

Railroads:—

The leading lines in the State.

Occupations:—

Agriculture, manufacturing, mining and commerce. In what part of the State is each most extensively carried on? How do they compare with the same occupations in other States?

Productions:—

Animal, vegetable, mineral.

Miscellaneous:—

Population. Objects of interest. Educational advantages. Natural advantages.

General Facts:—

Who was the first Governor?

Who is the present Governor?

Name and locate the leading colleges.

Name and locate the normal schools.

Has the State furnished any Presidents? Any Vice Presidents?

What famous men live in the State?

Where do they live? For what are they famous? What is the school age?

When was the present Constitution adopted?

If the Governor should die who would fill his place?

How many members in the Legislature?

What is the nickname of the State?

Why so called?

How many electors has the State in the Electoral College?

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EXAMINATION.

PHYSIOLOGY.

1. Describe in brief the organs of the thoracic regions.
2. Explain how an irritation on the foot may cause a motion of the hand to the part irritated.

ENGLISH GRAMMAR.

1. In what grades would you begin the study of grammar with children? Give reasons for your answer.
2. (a) To see is to believe. (b) I tried to believe. (c) The way to believe is to investigate. (d) He studied to believe. Give the use of each infinitive.
3. What is a subordinate clause? What classes of subordinate clauses are there?
4. To what extent would you combine composition work with grammar?
5. State the basis of the division of verbs into transitive and intransitive.
6. "Whom the gods would destroy they first make mad." Explain fully the use or uses of whom.
7. Analyze the following: The train then proceeded without delay until it reached the city, at 3 o'clock.

8-10. Write a composition of not more than 200 words on the subject, "How to Teach Ethics in the Common Schools." The productions are to be graded on the following points: Development of the subject, grammatical construction, punctuation, neatness of penmanship and arrangement, and dictation.

UNITED STATES HISTORY.

1. To what part of this continent was the name America first applied? State the origin of the name.
2. What are the distinguishing differences between savage, barbarous and half-civilized Indians?
3. Is it possible for men at the present time to make geographical discoveries? If so, in what parts of the world?
4. What was the occasion for the financial embarrassments under which Congress labored during the Revolutionary War? What man of wealth came to its assistance in a critical hour?
5. What territory has been added to the United States since the close of the Civil War? How and from what nation was it obtained?
6. Explain briefly the causes that led to the war between China and Japan.

GEOGRAPHY.

1. Explain the scheme of standard time as used in the United States.
2. Would you have primary pupils make a map of the home district? If so, why? How far ought it to be extended?
3. How do streams transport sediments?
4. Describe a volcano and the materials which escape from it.
5. What effect does a glacier produce upon its bed?
6. Describe in words or by map the outline of the Atlantic Ocean and its coast waters.
7. How does atmospheric pressure vary with altitude? How is the pressure measured?
8. What advantages would Canada gain from annexation to the United States?

9. What causes have made New York the largest city in America?
10. Why does Great Britain hold Gibraltar, Malta, Alexandria, Aden, Singapore and Hong Kong?

ARITHMETIC.

1. Find $\frac{1}{8} \%$ of $17\frac{1}{2}$ divided by 3.
2. Define percentage. Define amount, as used in percentage. Show that the latter definition comes within the former.
3. A sum of money has doubled itself in 16 years at simple interest. What is the rate per cent?
4. If the State house tax had been $\frac{1}{8}$ of a mill per \$100, what was the valuation of a man's property who paid \$5 State house tax?

5. Find the sum of fifty terms of the series 1, $1\frac{1}{2}$, 2—. What is the last term?

6. A and B worked for 17 days and received \$72.25; $\frac{3}{5}$ of A's wages equal $\frac{3}{4}$ of B's daily wages. How much should each receive?

7. If the use of \$3,750 for 3 years, 8 months and 25 days is worth \$336.25, what is the use of \$100 for 1 year worth?

8. Find the square root of 1.021 to two decimal places.

RUSKIN'S ESSAYS.

1. What is the theme of "Fors Clavigera?"
2. What does Ruskin consider useful and what useless employment?
3. "The first object of all work is to get food, clothes, lodging and fuel." Discuss.
4. What three material and what three immaterial things are essential to a happy, healthy life?

5. What does Ruskin say of machinery?

6. What are some of the effects of materialistic science pointed out by Ruskin?

READING.

"Roll on thou deep and dark-blue Ocean—roll!
Ten thousand fleets sweep over thee in vain;
Man marks the earth with ruin, his control
Stops with the shore; upon the watery plain
The wrecks are all thy deed, nor doth remain
A shadow of man's ravage, save his own,
When for a moment, like a drop of rain,
He sinks into thy depths with bubbling groan,
Without a grave, unknelled, uncoffined and unknown."

—Byron.

1. In the light of this stanza, what can you say of man's strength? 10
2. Give the meaning of "ten thousand fleets." 10
3. What feelings may be aroused in our minds by an intelligent reading of this stanza? 10
4. In what respect does the burial of the dead at sea differ from that upon the land? 10
5. Describe tone of voice, force, and movement in reading this stanza with good effect. 10
6. What characteristics of Byron's writings have led many persons to dissuade young people from reading them? 10

7. How do you manage a and the in a reading lesson? Give the different pronunciations of the. 10
8. Name three figures of speech used in this selection. 10
- 9 and 10. Read the stanza for the superintendent. 20

Answers.

PHYSIOLOGY.

1. The chief organs of the thorax are the lungs and heart.
2. It is the result of the reflex action of the spinal cord. The sensory nerves conduct the stimulus to the spinal cord, which at once reflects it back to the motor nerves and the part shrinks from the irritation. The movement of the hand toward the part irritated is also reflex action through sympathy.

GRAMMAR.

1. Not until the fourth reader grade, and the instruction in this branch, even

then, should be very elementary; for, lessons in languages, in which language itself will be developed in words, phrases and sentences, are the only kind of lessons needed below the Fourth Reader Grade. Some of the rules and relations of technical grammar may thus be developed from actual usage of the language. The educational value of technical grammar is, however, not such as to make it beneficial in the early years of school life.

2. (a.) "To see" is used as a noun, the subject of "is"; "to believe" is used as a noun, a predicate nominative after "is"; (b) "to believe" is used as the object of "tried"; (c) "to believe" is here used as an adjective, modifying "way"; "to investigate" is used as a noun, a predicate nominative after "is"; (d) "to believe" is here used as an adverb of purpose and modifies "studied."

3. Subordinate clauses are classified, as to use, into substantive, adjective and adverbial.

4. All through the course, the study of composition should receive at least as much time as the study of grammar. The study of the latter is of little value unless its rules of correct and intelligible speech are being constantly applied in the construction of sentences.

5. The division of verbs into transitive and intransitive is based on the nature of the idea to be expressed; as it is commonly put—"on the meaning," as to completeness or incompleteness.

6. "Whom" is used as the object of "destroy"; and as the connective of its clause to "him" understood.

7. This sentence is complex; "until," a conjunctive adverb of time, is the connective; "at 3 o'clock" is a prepositional adverbial phrase, modifying "reached."

UNITED STATES HISTORY.

1. To South America (some say to the whole Western world). The name "America" originated from "Amerigo Vespucci" (in Latin, *Americus Vespuclius*), a merchant and traveler of Florence, who was the first to describe it as a separate continent.

2. In the savage state the Indian is very ignorant, vicious, brutal and superstitious, and delights in war and bloodshed. Vermin and insects sometimes constitute his food, and he even feeds upon human flesh; his dwelling is of the rudest character, sometimes not more than a hole in the ground.

The Indians that are barbarous are generally bold and treacherous, and somewhat wandering in their habits;

they have their flocks and herds, which furnish them milk and flesh. They live in rude tents, and to some extent till the soil. They are divided into clans or tribes, over each of which is a chief.

In the half-civilized state the Indian congregates in villages, and adopts a settled mode of life. He tills the soil extensively, and practices some of the useful and ornamental arts. "He does not employ any of the great agencies of nature to assist him in his labors." Literature and science are only slightly cultivated.

3. In Central Africa, in Central and Northern Australia, and in the Polar regions.

4. To pay the expenses of war, Congress had issued an immense amount of paper money—continental money—and the chances for redemption seemed so uncertain that this money became almost worthless; also, it was skillfully counterfeited by the British.

At a critical time, Robert Morris came to the assistance of Congress with some "hard cash."

5. Alaska (1867); it was purchased from Russia for \$7,200,000.

6. China claimed a "suzerainty" in Corea, which the latter recognized by the payment of an annual tribute, and by conforming certain of her affairs according to the desires of China. Japan insisted that the "suzerainty" was extinct, because Corea had entered into treaties with foreign Powers as an independent Government, and Japan proposed to hold Corea to the close performance of obligations thus contracted.

GEOGRAPHY.

1. (See any late text-book.)

2. The primary pupils should first be required to make a map of the top of a table on which are placed a few objects. In doing this he learns to compare lengths, etc., and to use his judgment in regard to location and relative positions. Next, the pupil should draw a map of the school room; then, the school grounds, and so on, thereby extending his work, so that finally it has covered all within the limits of his daily life. His work should first be with these things, for they come within his own observation, and constitute a ground work as a basis for more advanced lines, in which he will need to be familiar with the geographical elements acquired by observation.

3. Streams transport sediment by swiftness of motion, and by the sediment being held in suspension in fine

particles. The stream in its course passes over sediment that readily disintegrates, and is thereby carried on with the water. In the slower portions of the stream, some of the sediment becomes deposited.

5. They deepen the valleys through which they move, and they cut deep parallel grooves in the bottom and sides.

7. Atmospheric pressure decreases with the increase of altitude and is measured by an instrument called the barometer.

8. (a) Free trade in our products, many of which she needs; (b) An unrestricted market for her products, many of which are desirable to the people of the United States; (c) The assumption of her debt by the United States Government; (d) A lessening of taxes consequent upon a lessening of revenue necessary to maintain and defend her local Government.

9. Because (a) of the richness of the surrounding country, thereby being favored by having the greater portion of the foreign commerce landed at her wharves; (c) of the position of the Hudson River, etc.

10. She holds Gibraltar, Malta, Alexandria, and Aden in order to protect her movements and rights, commercial and otherwise, in the Mediterranean Sea and in the Suez Canal, and to be able to dictate terms in the event of war. She holds Singapore and Hong Kong that she may be able to dictate terms in the event of any trouble or war that may arise in the East.

READING.

1. That his control "stops with the shore." On the land he can level the forests, tunnel mountains, build cities, etc., but he cannot leave even a footprint on the sea.

2. A general expression representing the ships or navies of the whole world traversing the bosom of the ocean.

3. Feelings of awe and humbleness (a) at the omnipotence of God in nature; (b) at the mightiness of the mighty waves of the sea; (c) at the puny strength of man; and (d) at his insignificance and helplessness in the presence of the power of nature.

4. There is no digging of a grave; no playing of a funeral march; no marching of a mourning procession. There may be performed a ceremony of some kind, more or less impressive, according to the character of the person, the nature of the surroundings or the extent of the conveniences, after which the body is lowered into the sea.

5. The voice should be solemn, the force impressive and the movement slow.
 6. On account of their melancholy and immoral character.
 8. (a) Personification—first line; (b) simile—"he sinks like a drop of rain"; (c) apostrophe.

ARITHMETIC.

1. Answer, .0734%.
 2. A percentage of a number is the result obtained by taking any per cent of it. The term amount as used in percentage is the sum or difference of the base and percentage, and is simply a per cent of the base.
 3. Answer, $6\frac{1}{4}$ per cent. A. Answer, \$4000000.
 5. Answer, 662 $\frac{1}{2}$; 25 $\frac{1}{2}$.
 6. $\frac{1}{3}$ A's = $\frac{1}{3}$ B's; $\frac{1}{3}$ A's = $\frac{1}{3}$ B's; 3-3 A's = 9-8 B's; A's + B's = 17-8 B's, equal \$72.25; $\frac{1}{3}$ B's = \$4.25; 8-8 B's = \$34; 9-8 B's = \$38.25.
 7. To be solved by compound proportion, the statement being as follows:

$$3750 : 100 :: 336.25$$

$$1345 : 360$$

the result is 2.4; hence the answer is \$2.40.

8. Answer, 1.01044.

—Indiana School Journal.

GRAMMAR.

FOR ADMISSION TO THE HIGH SCHOOL,
JANUARY, 1896.

[THE following set of questions, prepared by Dr. Soldan, has been pronounced by the principal of one of the grammar schools to be well worthy of being taken as a model. We present them accordingly as likely to be of service to teachers both in and out of the city:]

[Examiners will give special credit for excellence in penmanship, and for neatness.]

1. Write correctly the selection which will be read to you by your teacher.

(NOTICE TO THE TEACHER: This dictation exercise is to be taken from the beginning of Lesson 144, page 356, 5th Reader, as far as the words "for self-aggrandizement;" the heading should be included. Read the whole selection to the class before they begin to write, then read very slowly for dictation a few words at a time. After the class have written the selection the teacher reads it once more while the pupils are looking at their copy. There is to be no other repetition of words by the teacher.)

2. Define (a) abstract noun; (b) collective noun. Give two illustrations under each. (c) Write the plurals of the following: pulley, potato, thief, lily, chimney, echo, cupful.

3. (a) Copy the relative clauses contained in the following:

"He that filches from me my good name Robs me of that which not enriches him, And makes me poor indeed."

(b) When should a relative clause be separated from the rest of the sentence by a comma?

4. (a) Write a sentence in which the auxiliary verb *to be* occurs in the subjunctive mode. (b) What is expressed by a verb in the subjunctive mode? (c) Define transitive verbs and give a sentence in illustration.

5. Write the second person singular, subjunctive mode, active form, of the verb "choose." Also the imperative mode, the infinitives and the participles of the same verb.

6. Define (a) co-ordinate and (b) subordinate conjunctions and write under each a sentence for illustration.

7. Analyze the following sentence: "A soft answer turneth away wrath, but grievous words stir up anger."

8. Define (a) infinitive phrases, (b) participial phrases, (c) prepositional phrases, and under each give a sentence for illustration.

9. "The best authors should be read by the student, that he may thus insensibly acquire a grace and refinement of expression which no arbitrary rules can give."

(a) Give the form, mode, tense, person and number of *should be read* in this selection. (b) Decline *student*. (c) What auxiliary verbs are used in the above sentence? (d) In what mode is *acquired*?

10. Write a letter to one of your friends in which you state that you have finished the course of study in the eighth grade and that you are taking an examination for admission, to the High School. Explain to your friend what study you liked best in the school which you have been attending, and give the reasons for your preference.

"First in the fight and every graceful deed."

—POPE.

Famous, corner Broadway and Morgan, leads the van in high qualities, low prices, and pushing, progressive, honorable business methods. Our standing offer of "your money back if you want it" stands as an absolute guarantee of every transaction, small or large. Teachers in the public schools in particular are invited to take advantage of the special discount we allow them on all purchases. And if you like, we should be pleased to open an account with you. Remember, Famous, corner Broadway and Morgan.

NATURE WORK FOR THE SPRING MONTHS.

Many signs of approaching spring are already here. The mocking bird has returned from his long visit to the South land, the blue birds are here planning for their spring housebuilding, and a few robins have already made their appearance. March, April and May are truly the best months in which to bring the children into closer contact with Nature. The following outline from an exchange will be found full of suggestions at this time.

The Robin.—The spring is probably the best time to begin the study of the robin. Watch for his return. When are the first robins seen? Where do you suppose they have been? Why do you think they left us last autumn? Do they return in pairs? What do they eat during the early spring? Where do they find their food? How do they get it? Try to have your pupils discover a pair of robins that are just beginning to build a nest. Where is it building? Did you see the robins around there before they began to build? Did it seem to take them long to decide where to build their nest? Of what is it building? Where do the birds get the material for the nest? How is the material carried? Do both birds work in building the nest? What use is made of the mud? Do people ever use anything in building a house as the robin uses mud? How is the nest lined? How long are the robins in building the nest? Why do they build a nest? How many eggs does the robin lay? What is their color? How long must the robin sit on her eggs before they hatch? Try to have your pupils look into a nest full of young robins. Do they look hungry? Do both robins get food for them? How are they fed? How do you know the mother robin from the father? How many know the song of the robin? How many ever saw a robin while it was singing? Where was it? Do both robins sing? Why do you suppose birds sing? If possible, secure a live robin and make a study of its structure for the purpose of better understanding the function of the parts. Notice especially the shape of the bill—the position of the eyes—the way that the features are arranged on its body—the way that the wing feathers overlap—

the place of attachment of the wings—the tail and its uses—the slender legs—the toes and their arrangement. Ask the question "Why?" often.

Spring Beauty.—Have pupils find out where spring beauties grow. Are they found in the woods or not? On hilly or level ground, or on both? On high or low ground? If found on a hill, on which side of a hill are they found first? Were there many leaves where the first spring beauties were found? Have pupils collect specimens for study. Have them dig up the whole plant. What kind of roots has it? Do you think the spring beauties that you have dug up grew from seeds this spring? Why do you think they did not? What is the color of your flowers? Were most of the flowers that you studied last autumn of the same or of different colors? How did they differ? Is the pink all one piece? How many pink pieces has your flower? Would you like to know the name of each piece? Each piece or part is called a petal. What does each petal look like? You may pull off each petal. Is that all of the flower? Who sees something else that he thinks is a part of the flower? You may tell us what it looks like, and where it is, so that the rest of us may find it. A few questions like these will lead the pupils to discover the stamens. How many are there? Give the term stamen. What do you think they are for? In a similar manner lead the pupils to discover the pistil and the sepals. Teach these terms incidentally, but teach them. Children delight to call things by their right names.

THE Southwestern Business College of this city is one of the important factors in preparing young men and women for business.

Famous advertisements are to the public what the stock quotations are to the broker. Famous, corner Broadway and Morgan, buying and selling as it does on such a tremendous scale, is always able to quote prices lower than others, and shrewd, careful shoppers appreciate the fact. We offer special inducements to the teachers in the public schools, a special discount on all purchases, and the privilege of opening an account with us. That's certainly a great accommodation, isn't it? Famous, corner Broadway and Morgan.

INTERNATIONAL KINDERGARTEN UNION.

THIS organization dates from the Saratoga meeting of the N. E. A. in 1892. It was formed on the suggestion of Miss Mary C. McCulloch, Supervisor of the St. Louis Kindergartens. Its meetings since have been: 1893, Chicago; 1894 and 1895, New York; special meeting in Boston last November, and during the present month again in New York. At the Chicago World's Fair meeting, by a specially happy thought, Miss S. E. Blow was selected to preside. The Union is evidently a thing of Destiny, gathering force and definition as it proceeds.

The recent meeting in New York was held in the Teachers' College, Morning-side Heights. The first day was devoted to a special meeting of the Kindergarten Normal Trainers, the direct object being to elevate and more clearly define the proper standard of kindergarten work and workers. Along with this attention was given to and emphasis put upon the connection between the study of literature and art with the prescribed kindergarten course.

Miss Amalie Hofer, editor of the *Kindergarten Magazine*, Chicago, and chairman of Committee on Kindergarten Literature, presented an elaborate report, giving a classified selection of works for supplementary reading for Kindergartners; *Helpful Books For Mothers*; *Books valuable to Primary Teachers*, and a General List of Books for others interested in this phase of Education.

The "Union" convened, as it happened, on Valentine's Day, Dr. Hervey, President of the College, presiding; and the St. Louis *Froebel Society* presented, by Miss McCulloch, its special representative, their "Valentine"—a triple heart with this motto from Froebel. "All is unity; all rests in unity; all springs from unity; strives for and leads up to unity, and returns to unity at last." It is the *unity of the heart*, symbolizing practical sincerity and union of life.

Addresses were given by Miss Mackenzie, Philadelphia; Miss Laws, Cincinnati; Miss Hain, New York; Miss Fitts, Brooklyn; Miss Wheelock, Bos-

ton; Dr. Hunter, New York; Miss Symonds, Boston, and Miss Pingree.

On the second day, besides an address by Dr. Williams, of New York, other addresses were presented as follows: Miss McCulloch, St. Louis, on the "Relation of the Kindergarten to Social Reform;" Miss Hofer and Miss Bryan on "Child Study;" Miss Nora Smith on the "Art of Story Telling," with practical illustrations; Hamilton W. Mable, editor of *The Outlook*, on the "Culture of the Kindergarten;" James L. Hughes of Toronto, and Mrs. Hailman, of Washington, D. C., on the "Relation of the Kindergarten to the Public Schools."

On her return to St. Louis, Miss McCulloch's enthusiasm expressed itself first of all in a report to the *Froebel Society*, and found full response in the enthusiasm of its two hundred members. And this enthusiasm had full justification, for not only had Miss McCulloch to tell them of the great meeting and of her visit to and prolonged consultation with the leading spirit of kindergartening in America, Miss S. E. Blow, but she was also able to announce to them that the next meeting of the Union will be held in St. Louis during Easter week in 1897.

We acknowledge a very pleasant call from John Macdonald, editor of the "Western School Journal," Topeka, Kas. Brother Macdonald was on his way to the superintendents' meeting at Jacksonville, Fla. He is one of those live, progressive educators of the West, and we do not wonder that the teachers of Kansas are proud of their editor and his progressive journal.

L. Westfall, of St. Louis Schools, will spend a part of his summer vacation at institute work. He is one of our best educators.

Read the advertisement of the Edinboro Publishing Company, page 37.

A TEACHER WANTED in every township to represent the Home University. Largest institution teaching by mail exclusively. Money is for you. Also a course of lessons without cash expense. Particulars on application. Send stamp for free trial lesson, naming branch in which you are interested. 33 branches taught. Address **HOME UNIVERSITY**, Insurance Building, St. Louis, Mo.

Practical Methods

"THE MORNING MEAL."

BY EDDIE STONAKER.

A Language Lesson, suggested by the picture in the February Journal.

This morning Eddie rolled out of bed when it first began to get light and went to see his dog. His dog's name is Jack, and Eddie feeds him milk every morning. Eddie's mother gives him the milk in a pan, and Eddie carries it to Jack.

If Jack drinks all the milk, Eddie will go and get some more. Eddie is only 4 years old, but he is very smart, and he teaches his dog many tricks. One trick he has taught him is to bring in a stick of wood whenever he is hungry. When Eddie has fed his dog he will go and dress himself and eat his breakfast; then he will play with Jack.

Pleasant Knoll School, Pulaski, Io.

PRIMARY LESSON.

The Hand.

The hand is one of the distinguishing features of man. What is sometimes called hand in the monkey, on account of the fact that one finger is shorter than the others and answers somewhat the purposes of the thumb, is but a poor imitation when compared with the hand of man and its wonderful power to execute the designs of the brain.

This may be made a very interesting topic to even young children, while one who has observed the hands of an average primary class will not fail to realize the need of a practical lesson on this subject.

PURPOSE OF THE LESSON.

To call the attention of the child to the structure and proper care of the hand, and to his own power in directing its movements, is the purpose of this lesson.

Time suggested, the last period before closing the session of school.

Preparation.—In planning the busy work which will precede the lesson on the hand, it would be well to assign such work as will attract the children's attention to the subject about to be studied.

Suggestion.—Pass paper, pencil and scissors to each pupil. Have the children place one hand flatly upon the paper, tracing its outline as accurately as possible with their lead pencils. Ask all those who can to write the name of the fingers in their proper places. Most advanced first year pupils will be able to name the thumb and little finger; a few may know the index finger, and possibly one or two may be able to name them all correctly.

When they have finished drawing allow them to cut out the paper hand, so that it will look as nearly like the original as possible.

If there is sufficient time they might try drawing their right hand also, and when cut out place the left hand upon the left side of the desk and the right hand upon the right side. In this connection a drill might be given to teach the children to distinguish the right from the left hand.

If preferred, instead of attempting to name the fingers, each child might write in the palm three or more things which his hand can do; the beginning class drawing, crudely, of course, pictures of objects which they can hold.

Before beginning the lesson the teacher should have a definite outline of the subject in mind, and by skillfully guiding the observations and line of thought, make the lesson interesting from first to last.

For this lesson the following outline is suggested for the teacher's use:

The Hand:—

1. Of what is the hand composed?
2. Its movements—joints.
3. Use of the hand.
4. Its protection, skin and nails.
 - a. Care of each.
5. Our control of its movements.

As the lesson progresses, select for emphasis only those of the children's answers which bear upon these points. In a future lesson another phase might be taken up—as, ways to train the hand, etc.

THE LESSON.

That nothing may divert the attention of the children from the subject to be considered, have the scissors and scraps of paper left from cutting out the paper hands all collected and put away before the lesson is begun.

Then the teacher asks some child to tell her what he has made. Accept the answer: "A hand or a paper hand."

Teacher: "Now put your hands on your desks beside the paper hand. You may tell me one difference between them."

Among the answers will doubtless be some like these:

"My hand is thick, the paper hand is flat."

"My fingers have nails."

"The paper hand can't move itself."

In this way the children will be learning comparison as well as observing facts.

Teacher: "What is there in your hand which makes it thick?"

Some child will probably say, "Bones and flesh." The word "muscles" should be given them, if the class is ready for the word, but little attention need be paid to that part in this lesson.



If the children do not know the names of the fingers, draw a large hand horizontally on the blackboard and write the names of the fingers in their respective places on the drawing.

first obtaining as many of the names as possible from the children.

Where the class has had kindergarten songs and finger plays, the exercise might be made more interesting by sketching faces on the nails in the picture and then naming the "little men," as the fingers are often called in the children's songs.

This little device will be of service when the care and training of the hands are considered. If the child feels that his fingers are his servants and that he is responsible for their appearance and ability to do certain work, he may be more careful both in keeping them clean and in the manner of doing work assigned to him.

After teaching the names of the fingers, return to the real hands upon the desks.

Teacher: "Count the bones in your fingers and thumbs. Why do we need so many? You may pick up your pencils, watching your fingers as you do so. John may come here. You may play that you have but one long bone in each finger, and that you have no knuckles, and then you may pick up this ball."

John soon discovers that he must take both hands. By a few of such experiments the children will observe that we need many little bones with joints to help us to grasp objects, and to enable us to do fine work.

Then set the class thinking by asking them why dogs do not build their kennels as man builds his house. Why a bird builds her nest of straws, mud or of little sticks, instead of bricks or boards. Why kittens play with grass, strings and balls, instead of making toys for themselves as some boys do.

The children will be eager to answer. They may soon be led to see that the dog lacks the intelligence to plan a house as well as the hands with which to build it; that the bird must use material which she can handle with her delicate little bill, and the kitten must find ready-made toys, for her soft paws cannot use tools.

Ask the children to name all the things they can think of which could not be made if we had no hands. The little ones will be quite astonished at the result, which might be written upon the board. Then turn to the subject

of the protection of the fingers and hands.

Teacher: "Did any of you boys ever pound your finger nails. Fred may tell us what happened."

"The nail turned black and came off."

"How did the finger feel when the nail was gone?"

"It hurt every time I hit it against anything until the new nail grew."

"Who can tell me of what use the finger nails are?"

From various answers given, the teacher might formulate something like this:

The nails make the fingers look prettier and keep them from being easily hurt, and help us to pick up small things, like pins.

Teacher: "Why should we be careful to keep our hands and finger nails clean?"

After a little discussion as to looks and cleanliness, the teacher might tell the children a story.

Freddy in No-Hand Land.

Freddy didn't like to have his hands washed. His finger nails were often dirty, too, so that his mamma was ashamed to have him come to the table. Freddy would play all day and all the next day without ever having clean hands if his mother did not take him into her room and wash them herself.

One day this little boy was very cross, and when it came time for his hands to be washed he became angry and ran out of doors and into the barn.

"I wish I didn't have any hands," he exclaimed, as he threw himself down on the soft hay-mow, "then they wouldn't have to be washed."

In a few minutes a little man came up close to him.

"You are in my country now," said the quiet little man, "and first of all I must take off your hands."

"What do you mean?" exclaimed Freddy, surprised and frightened.

"Why, don't you see, you are in 'No-Hand Land,' where all the people live who wish that they had no hands. Some people come here because they do not want to work, but," he continued, glancing at Freddy's hands, "I see that you came to escape being washed. Well, you won't be bothered any more, for you will have no hands to wash."

Freddy felt helpless, for the little man was very strong. But he had said that he wished he had no hands, and

he wouldn't be a coward now, so he shut his teeth very tight and whined hard to keep back the tears while the little man unfastened his hands and took them off. Then the little man laughed and told Freddy that he would find some other children over the hedge in the field, and that he might go and play with them.

Freddy went, but it was a sorry little group of children that he found. Play! What could children play with out hands? There was no use in thinking of ball, marbles or shinney. Even pull-away and tag could not be played there, for how could anyone be caught if the catcher had no hands?

A bell rang, calling the children to dinner.

Freddy was very hungry, but he could not see how he could get anything to eat without hands, and when nobody else had any hands with which to help him. So he lay down on the ground and cried loudly. He was very sorry for the foolish wish he had made in the barn. Soon the bell rang again, louder this time, and someone was shouting "Freddy."

Freddy opened his eyes. The rafters of the barn were over his head, the soft hay was under him. It was his father's voice calling his name. The queer little man was no longer in sight.

At first Freddy was almost afraid to look at his hands, lest he should find them missing, but finally he pulled them both from under his head and looked at them. It had all been a dream, but it seemed to him that they had never looked so dirty and neglected before.

He swung from a beam down to the barn floor, and scampered into the house. He was very hungry, and his father and mother had been waiting for him, but before he sat down to the table he went to his mother's room and washed his hands and carefully brushed his nails. He did the same thing at supper time. His mamma wondered, but said nothing.

That night, after she had put him to bed, Freddy told his mamma about the queer little man and his visit to "No-Hand Land," and how his wish that he had no hands was fulfilled.

"I mean to keep my fingers clean after this," he said, "but if I ever forget, you just say 'No-Hand Land,' and I'll remember at once."

This story may assist the teacher in her mammoth task of keeping the

children's hands and nails clean. "Freddy in No-Hand Land" may be an effectual reminder.

By talking of slight cuts and burns and the pain occasioned when the skin is removed from any cause, the office of the skin in protecting the flesh may be brought out.

Then take up the subjects of the movements of the hand.

Teacher: "Some one told me that the paper hand could not move itself. You may all place your left hands upon your desks. Now you may watch them and see if they move themselves."

Some of the slower children will doubtless insist that they do. But choose some such as:

"I can move my hand."

To give variety to the exercise, ask several children to perform different acts involving the hand movement.

"John may shake hands with Chester." "Mabel may pass her book to Julia." "Ned may open the door."

Teacher: "You may tell me what your hands did."

From numerous answers, for all the children should be allowed to take part in such discussions, select something like this:

"Our hands did what we wanted them to do."

Teacher: "We must be careful, then, to want our hands to do kind, helpful things which will make us of use to others, and which will make others happy."

A little talk about what children's hands can do to be helpful will not come amiss for a "Morning Talk" the next day, as much unkindness is attributed to the child's perpetual excuse, "Didn't think."

The following is a suitable memory gem:

"Beautiful hands are those that do Work that is earnest, brave and true, Moment by moment, the whole day through."

—From the *School Physiology Journal*, by permission of the editor.

OUTLINE OF NUMBER WORK.

March and April.

BY WM. M. GIFFIN.

CRITICISMS.—There is a tendency on the part of the practice teachers to avoid fractions, e. g., if 15 grams of green apples have been weighed, then dried, then weighed again, the teacher

should be more pleased to have the dried apples weigh 3.4 grams than an even 3 grams.

"The difficulty of fractions does not consist in the exercise of the numbering faculty, but in the use of complex forms, rules and definitions. It can be said in a word, that fractions should be learned precisely like whole numbers." (See Talks on Pedagogics, page 101.)

Let the question be—how many pounds of sugar at 5 cts. a pound can one buy with \$9? A child in the third grade knows that he must change his dollars to cents and then say, "I can buy as many pounds as there are 5 cts. in 900 cents, or 180, i. e. 900 cts. \div 5 cts. = 180."

The question may be—A has 3 bushels of wheat which he desires to put up in three-pint bottles. How many bottles does he require? Here again, we are to divide a number into a number of equal numbers, hence the divisor and the dividend have the same name, so we change the bushels to pints and say, "He must have as many bottles as there are 3 pints in 192 pints, or 64, i. e., 192 pts. \div 3 pts. = 64."

Let the question be—A has $\frac{1}{2}$ of an apple and desires to divide it among some boys, giving each boy $\frac{1}{4}$ of an apple. How many boys are there? Nothing new is presented here. We are to divide a number into an equal number of numbers, hence, we change the $\frac{1}{2}$ to eighths and say, as many boys as there are $\frac{1}{2}$ in $\frac{1}{2}$, or 3, i. e., $\frac{1}{2} \div \frac{1}{8} = 3$.

It is impossible to do the Nature Study work and not meet all kinds of fractions, hence, "The child, when he reaches the Fifth Grade, may know all there is to be known of fractions, with the greatest ease, if fractions are really taught."

SUGGESTIONS.—(a) In the evaporation experiments, .5 of a liter may be used, in a given time, .2 of this may have evaporated. If the children are asked how much of a liter evaporated do not allow them to say, .2 times .5, as it is not an example in multiplication. There is no such thing as $\frac{1}{3} \times \frac{1}{3}$, $\frac{1}{3} + \frac{1}{3}$, etc. These are questions in partition, and should be written: .2 of .5, $\frac{1}{3}$ of $\frac{1}{3}$, etc.

(b) Lead the children to discover why we point off in multiplication of decimals as many places in the product as the sum of the places in the multi-

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plicand and the multiplier. See Development lesson, "Supplementary Arithmetic," Part III, p. 18.

(c) When finding the bulk of any given volume of water, lead the children to discover that for every cubic foot of volume we have 7.48 gallons of water. This does away with changing the volume to cubic inches and dividing by 231. See Supplementary Arithmetic, Part III, p. 35.

THE FUNDAMENTAL OPERATIONS.

There is no reason why conditions should not be presented making it possible for the children to discover each of the five rules.

SUBTRACTIONS.—I make three marks, thus: *III*. I write a figure to express the number, thus: 3. I make ten marks, thus, *|||||*. I express that number thus; 10, i. e., one 10 and no 1s. So 11, 12, 13, etc., express one 10 and one 1, one 10 and two 1s, one 10 and three 1s.

I write 23 and ask the pupils to express it in another way, and if patient I soon get one ten and thirteen ones, which may be written $1\frac{13}{10}$.

I am to work the following: 48-42.

I write it 42
18

I express my 42 in another way (not borrowing one from the tens, etc.), thus: 3 12 and subtract, getting 24.

42 Now the children should be asked to work such problems as 48-29, etc.

24 The children to think the change and not to write it, as above, we have 9 from 18 and 2 from 3, or 48-29=19. Just such questions come through the science work.

DIVISION—Following the same method as in subtraction, we may be required to work 421÷5. Here we see the number 425 expressed as follows: 40 tens and 25 ones, and say there are 80 fives in 40 tens, (or 8 tens) and 5 fives in 25 ones. Written out thus: 40 25
Here, as in subtraction, 5)425 the children are to think the change and not write 85 it. Here, too, the science lessons will furnish us with many problems.

LONG DIVISIONS.—5)4870(In this question what do we mean when we say 5 is not contained in 4? How many figures are to be used to express the quotient? How can we tell? When we say, 5 is in 48 *nine*, what do we mean by *nine*? Are there any *fives* in 4000?

LANGUAGE LESSONS.—Require many original problems to be written by the pupils. Do not accept any that make salt \$5 a pound, or silk 3 cts a yard. Let the prices of the day be the standard.

A greater interest will be had in the physical culture work if it is related to the work in arithmetic. Suggestive problems are here given to illustrate how alive both subjects may be made by their use. Every child loves to hop, skip, climb, run and jump. Such fun related to his school work makes it far more interesting to him.

Physical Training Department.

OUT-DOOR WORK.

High Jumping.—Beginning at a height of 42 in., one point is scored for every two in. up to 60 in.; above 60 in. one point for each inch. What is the height reached with 12 points scored?

Broad Jumping.—One point is scored for each foot from 12-15 feet, beyond 15 feet, one point for each half-foot. How many feet to score 10 points? Henry

jumped 16½ feet. How many points did he make?

Hop, Step and Jump.—26 feet=1 point; up to 30 feet, one point is scored for every two feet; beyond 30 feet, one point for each foot. How many feet to secure 10 points? John made 27½ feet in a hop, step and a jump; how many points did he make?

Rope Climbing (hand-over-hand).—20 feet=1 point; every two additional feet =1 point. How many feet to score 10 points? May climbed 33 feet, hand-over-hand. How many points did she make?

100 yard dash=12 seconds. One point for each one-fifth second less. How many seconds with a score of 10 points?

220 yards at one point for each sec. below 35 sec. How many sec. at 10 points?

A mile has 5280 feet. How many yards in $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{1}{3}$ mile? At the rate of 120 steps per minute (walking) how many minutes to walk a mile? How many steps? Average length of steps? (In all grades above the third. Compare).

Same, running. Number of steps and seconds to leave the building?

—C. C. N. S. Envelope.

DRAWING LESSONS.

BY J. H. BARRIS.

If inexperienced in drawing, prepare the lessons as directed in January number.

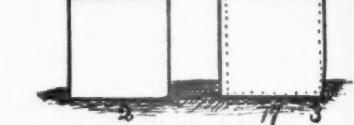
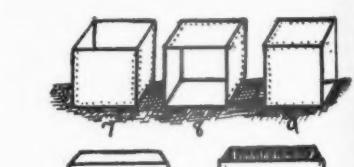
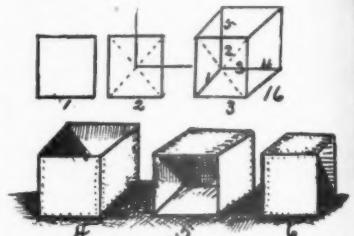


When giving these lessons use models. Talk about the cylinder, cone and cube, asking questions and giving explanations, such as definitions, and as to what kind of lines are used in forming the sides, ends, shading, etc.

LESSON X.

1. Draw on blackboard before the class Fig. 1, allowing space for lines representing the cylinder.

2. Add lines as Fig. 2, allowing class time to add each line before you draw next one, 3, complete by adding lines, as Fig. 3.



LESSON XI.

1. Draw lines, as Fig. 1.

2. Complete drawing by adding lines, as Fig. 2.

LESSON XII.

1. Draw lines forming cylinder, as Fig. 1.

2. Add lines, as Fig. 2. Complete, as Fig. 3.

LESSON XIII.

1. Draw lines, as Fig. 1.

2. Complete drawing by adding lines, forming the cone, as Fig. 2.

LESSON XIV.

1. Draw Fig. 1.

2. Complete, as Fig. 2.

LESSON XV.

1. Draw dotted lines, forming cone, as Fig. 1.

2. Add shaded line, as Fig. 2.

3. Add lines, as Fig. 3.

4. Complete, as Fig. 4.

LESSON XVI.

1. Draw lines, forming a square, as Fig. 1.

2. Draw dotted and shaded lines, as Fig. 2.

3. Complete drawing by adding lines, forming the cube, as Fig. 3.

4. To represent Fig. 4, erase lines 1, 2 and 4 in Fig. 3, and have Fig. 7. Add shaded lines and you have lines representing box open at top, as Fig. 4.

1. To represent Fig. 5, erase lines 4 and 5 in Fig. 3, and have Fig. 8.

2. Add shade and have box open at end, as Fig. 5.

1. To represent Fig. 6, erase lines 1, 2, 3 and 5 in Fig. 3, and have Fig. 9.

2. Add shade and have box open at side, as Fig. 6.

LESSON XVII.

1. Draw square as in lesson 16, Fig. 1.
2. Add lines as Fig. 2, forming the cube.
3. Complete drawing by adding lines as in Fig. 3, and have lines representing box open at top, as Fig 3.

PLATE 2.

LESSONS IN VERTICAL WRITING.

(By E. C. Mills, Western Normal College, Bushnell, Ill.)

NO. 3.

LOOKING BACKWARD.

The system of sloping writing has served its purpose well, still another system is before us for trial. Every educator and person interested in pen-

developed, written without shade and without flourish, and has met the exigencies of the times admirably.

The next step is to make the work still more simple by shortening the connective lines and downward strokes and developing a style of writing known as the vertical hand. The forms are simple, and are, without doubt, more legible. Whether the production

of the upright characters is as natural in action is the main question in dispute. Time alone will tell which is the superior system, the slope or the vertical.

INSTRUCTION.

Practice very carefully on the copies presented on Plate 2. Each letter should receive its share of attention, and do not be in a hurry to take up more difficult work. Use mostly arm movement. The arm should rest on the desk, and use mainly the muscles of the forearm. The arm should act and move toward the right whenever the movement becomes cramped, usually between words. In practicing the exercises, and in writing long words, let the arm move gently toward the right without lifting the pen from the paper.

SENDING SPECIMENS.

We will consider it a kindness if

t agree to acknowledge the receipt each one, but the work will be look-over carefully, and criticisms made the next number of the "Journal." Address all such specimens to

E. C. MILLS,
Bushnell, Ill.

TREATIES MADE BY THE UNITED STATES.

I. Seventeen treaties were made by the United States before the adoption of the Constitution. Among the most important are the following:

a. With Indian tribes.

b. In 1778, with France (first treaty of the American Colonies independent of the mother country). Amity, commerce, alliance.

c. In 1782-87, Netherlands, Sweden, Prussia, Morocco. Amity, commerce.

d. In 1783, England. Independence of the United States; Florida given by England to Spain.

II. Treaties made since the adoption of the Constitution:

a. In 1795, Jay's treaty with England.

b. In 1803, France; Louisiana added to the United States.

Withdrawal of British from posts on Northern frontier, settlement of boundary disputes, provided for Consuls in each country, and for extradition.

c. In 1814, England; settlement of boundary disputes, declared against slave trade, silent upon the subject of impressment and fishery rights.

d. In 1817, with Indians of Northwest Territory.

Many local treaties with Indian tribes have been negotiated that are of little importance. But this one is noteworthy because (a) it involved the interest of a very large number of tribes throughout the Northwest, and (b) it committed our Government to the policy of placing Indians on "reservations." It was thought that by thus surrounding them in small groups by civilized men they would the sooner yield to the influences of civilization.

e. In 1819, Spain; Florida ceded to the United States.

f. In 1842, Ashburton treaty with England. Settled boundary between Maine and Canada.

g. In 1846, England; settled boundary between Oregon and British America.

h. In 1848, Mexico; secured to the United States California and New Mexico.

i. In 1849, with England; Clayton-Bulwer treaty. Refers to the ship canal connecting the Atlantic and Pacific by way of the San Juan de Nicaragua River. Neither party should obtain exclusive control over canal, erect fortifications commanding the same, nor colonize or exercise any dominion in any part of Central America.

(The Tripartite Treaty was proposed, but never negotiated. After the in-

vasion of Cuba by Lopez, England and France, believing that the United States were planning to acquire Cuba by conquest, proposed a treaty among the three nations by which each was to disclaim then and forever all intention of possessing Cuba. The Secretary of State, Edward Everett, replied in a masterly paper that the Federal Government would keep good faith with all nations, but that it did not recognize in any European Government the right to meddle in purely American affairs, and that any such interference would be resented according to the Monroe doctrine.)

j. In 1854, with Japan; commercial.

k. In 1868, China; the Burlingame treaty provided for commercial intercourse, and secured rights of Americans in China and of Chinese in America.

Anson Burlingame had a remarkable career as a treaty maker. President Lincoln sent him to China in 1861, where he represented our Government until 1867, when the ruler of China made him special Minister from that country to the United States to negotiate a treaty. This was something altogether unique and unprecedented in the annals of diplomacy. Mr. Burlingame did his work for China so well that the Chinese Government appointed him in a similar capacity to negotiate treaties for that Empire with the leading European nations. He had entered upon this work when he died at St. Petersburg.

m. In 1871, England; provided for a commission to settle the Alabama claims and Canadian fishery question.—W. H. Cheever, in the Western Teacher.

D. L. Musselman, President of the Gem City Business College, writes us that they are now located in their elegant new building. This elegant edifice, with the grounds and furnishings, cost \$100,000, and is probably the largest and finest building ever erected in America for a Business College. It has a capacity for seating 1000 students, and as they now have an attendance of from 700 to 900 each year, the new building will soon be filled.

How's This.

'We offer One Hundred Dollars' Reward for any case of Catarrh that cannot be cured by Hall's Catarrh Cure.

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Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system. Price, 75c. per bottle. Sold by all druggists. Testimonials free.



NATURE IN VERSE. A Poetry Reader for Children. Compiled by Mary I. Lovejoy. 12mo. 319 pp., illustrated, handsomely bound in cloth. Introductory price, 72 cents. Silver, Burdett & Co., Publishers, Boston, New York, Chicago, Philadelphia.

To familiarize children with the beauties of nature, to make them feel at home with bird and flower and insect, is to do them a lasting service. To accomplish this there is no more potent element than apposite and attractive verse. Children are naturally poetry lovers.

There has been a lack of nature poetry books for children, though an abundance of material of which to make them. This work will be welcomed by all those progressive teachers who are earnestly striving to put their pupils in close touch with nature.

YELLOW BEAUTY. By Maria Martin. Published by Laird & Lee, Chicago. This is a dainty little cat-book, with illustrations reproduced from Madam Henriette Ronner's beauties. The pictures are alone worth the price of the book, and the story is told in a very charming manner. Children will be delighted with it.

MYTHS AND MOTHERPLAYS. By Sara E. Wiltse. Milton Bradley Co., Springfield, Mass. Price, \$1.00.

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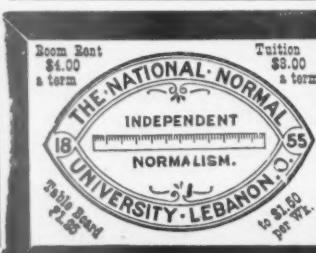
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